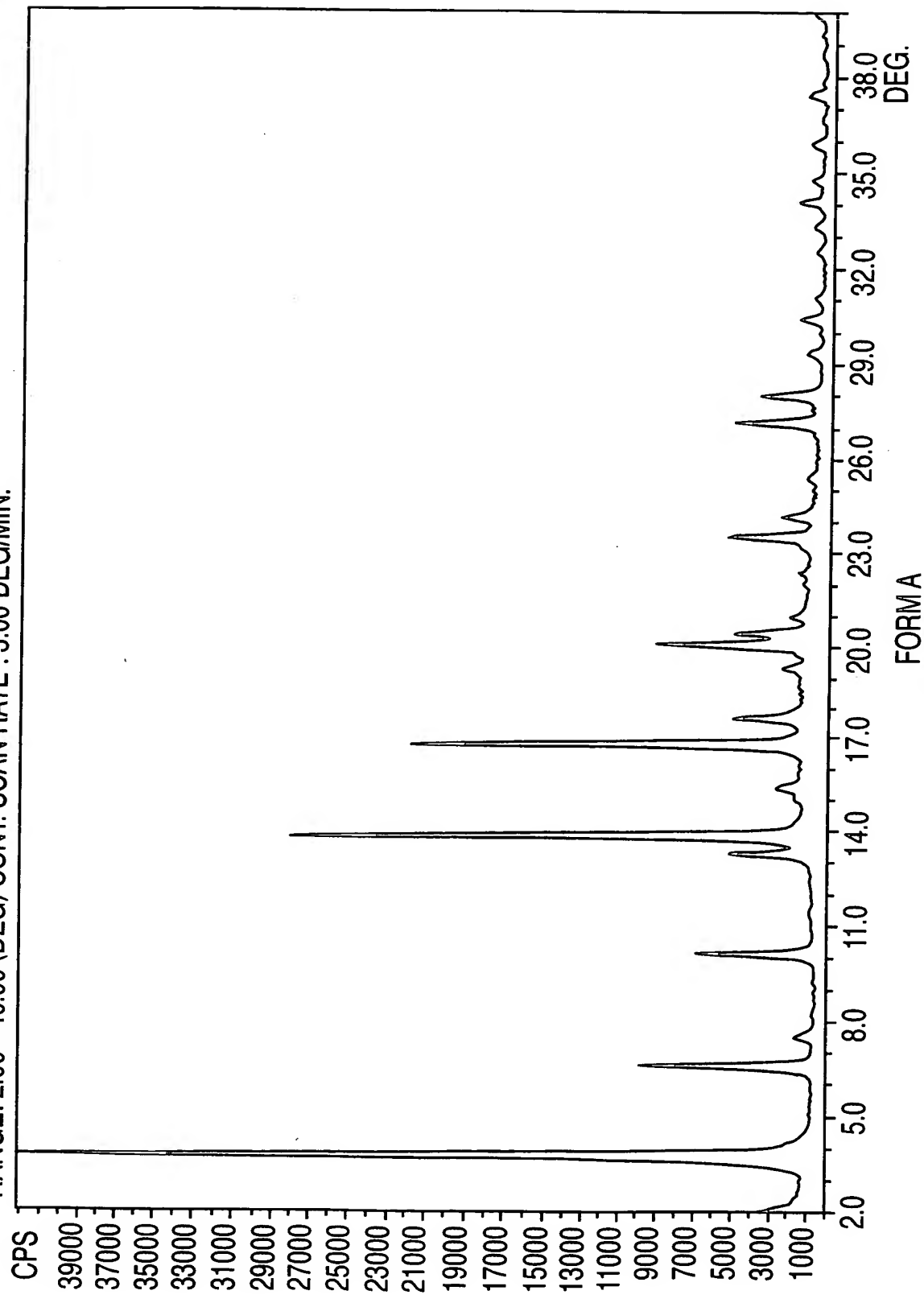
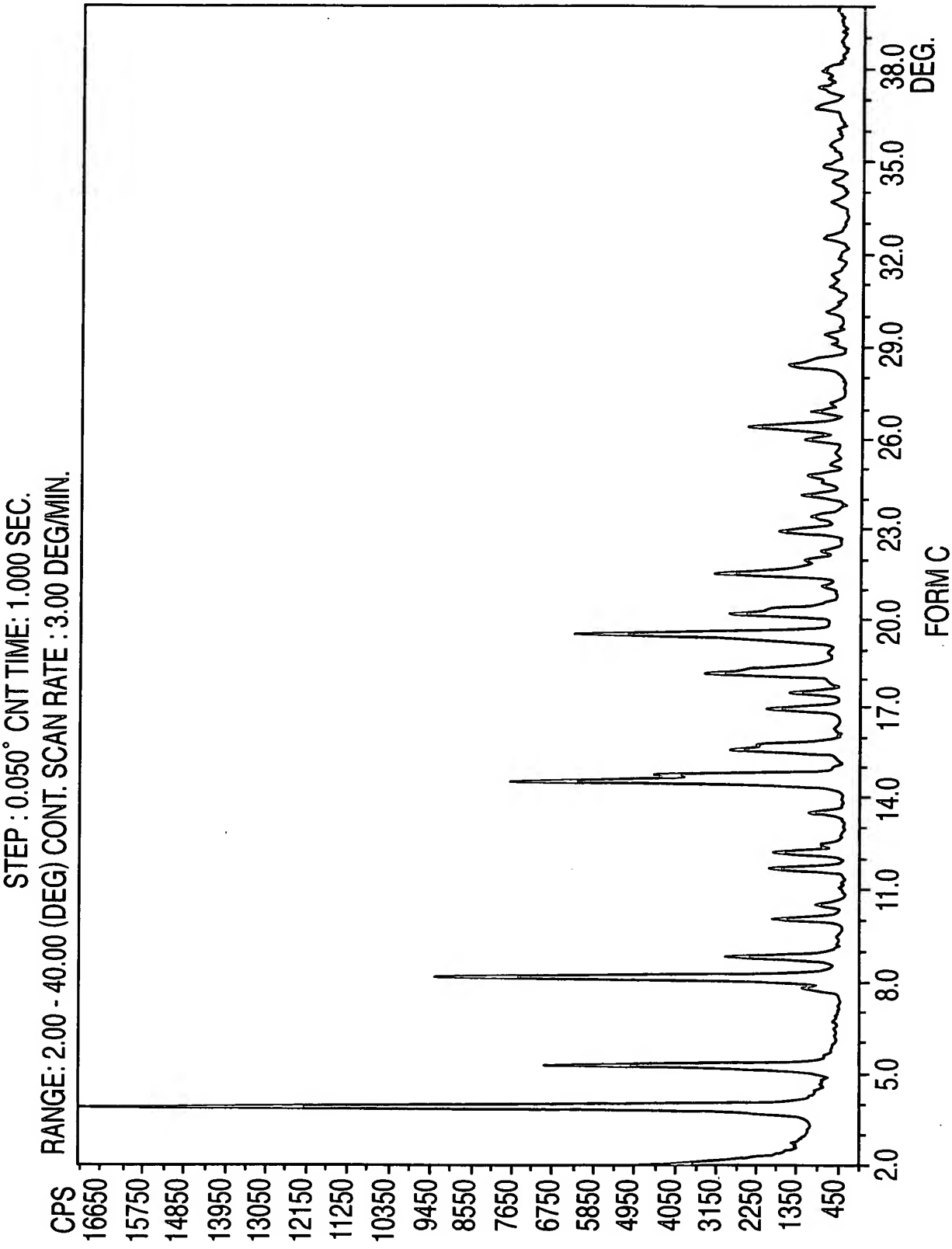


FORM A

FIG. 1


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
16650
15750
14850
13950
13050
12150
11250
10350
9450
8550
7650
6750
5850
4950
4050
3150
2250
1350
450
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM C

FIG. 2

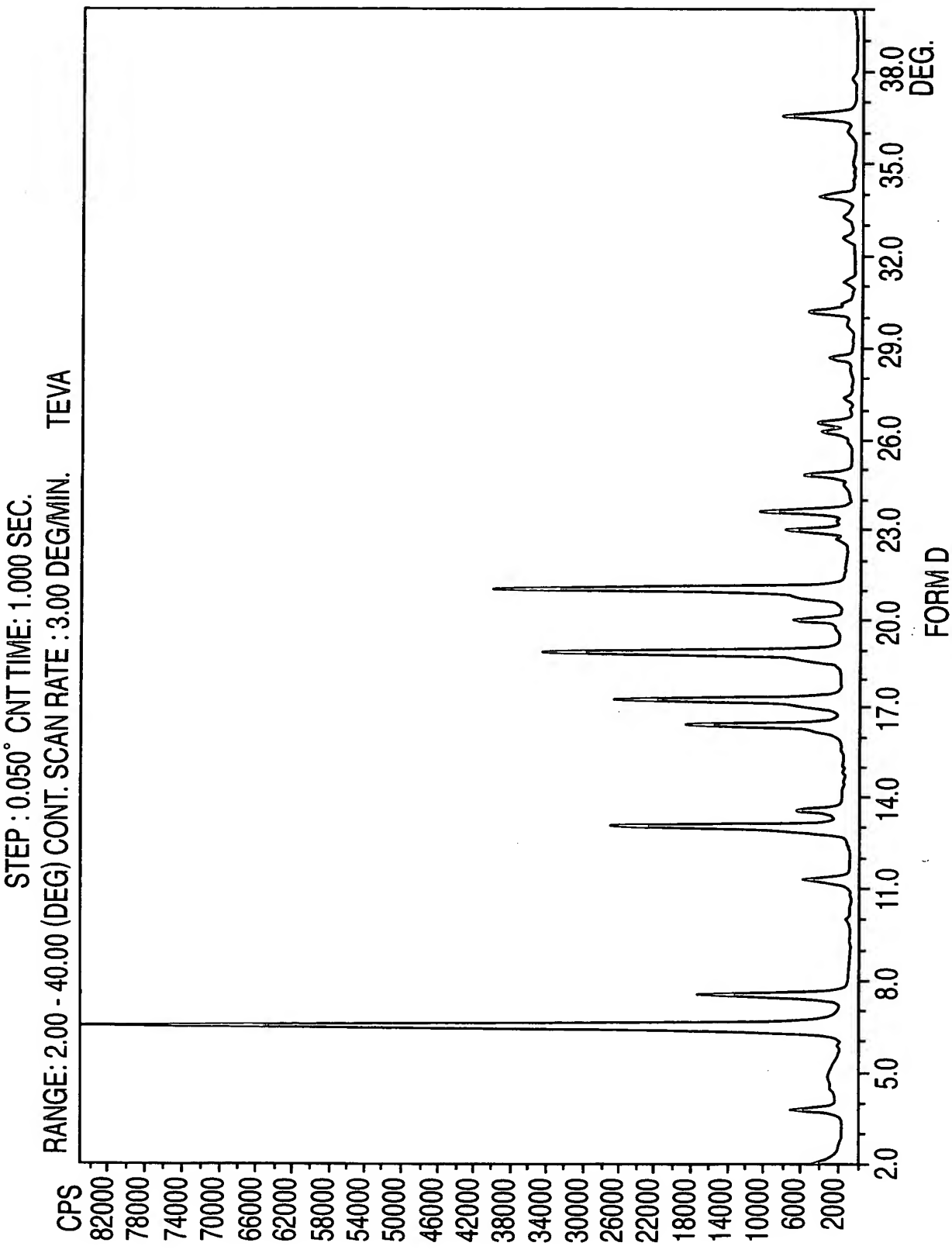
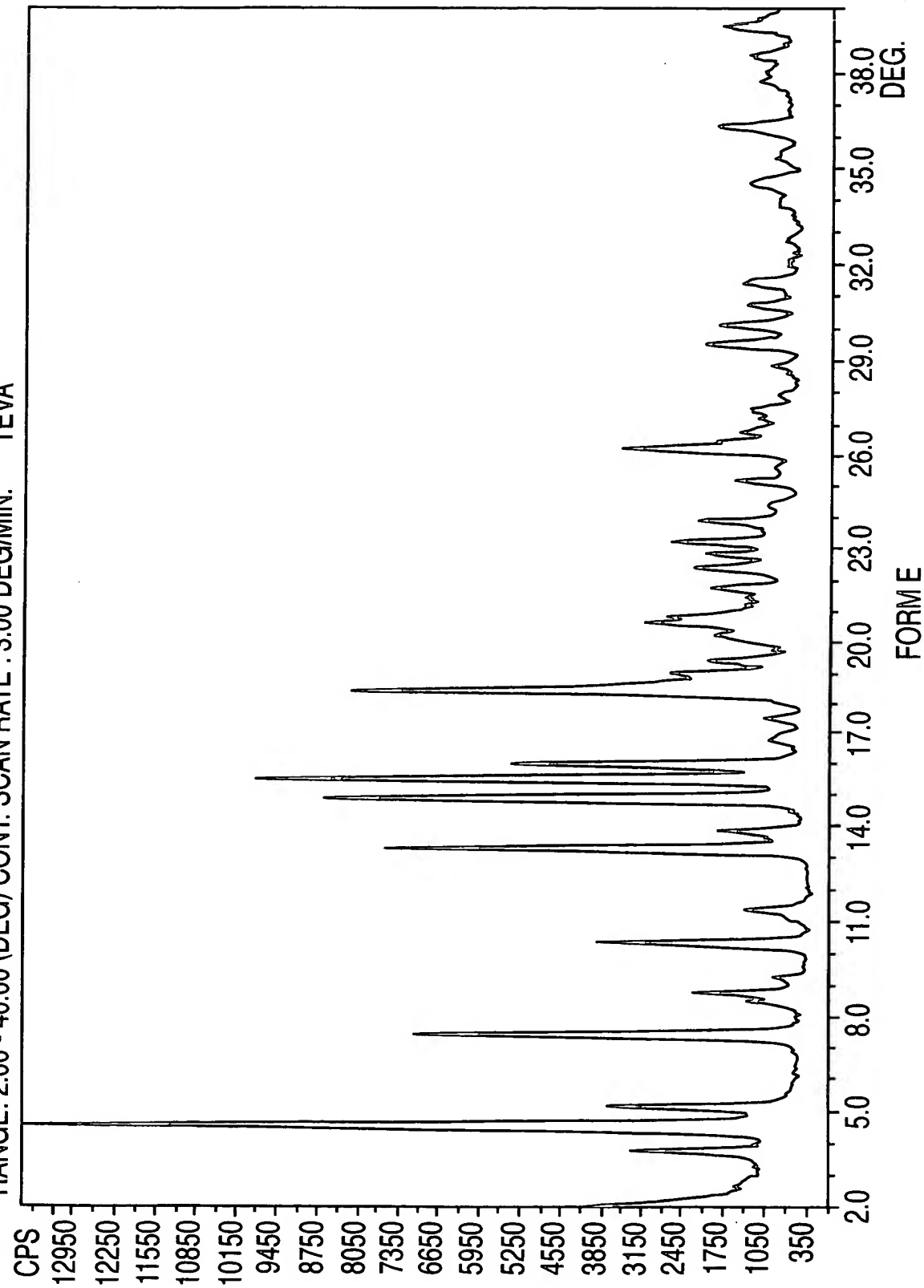
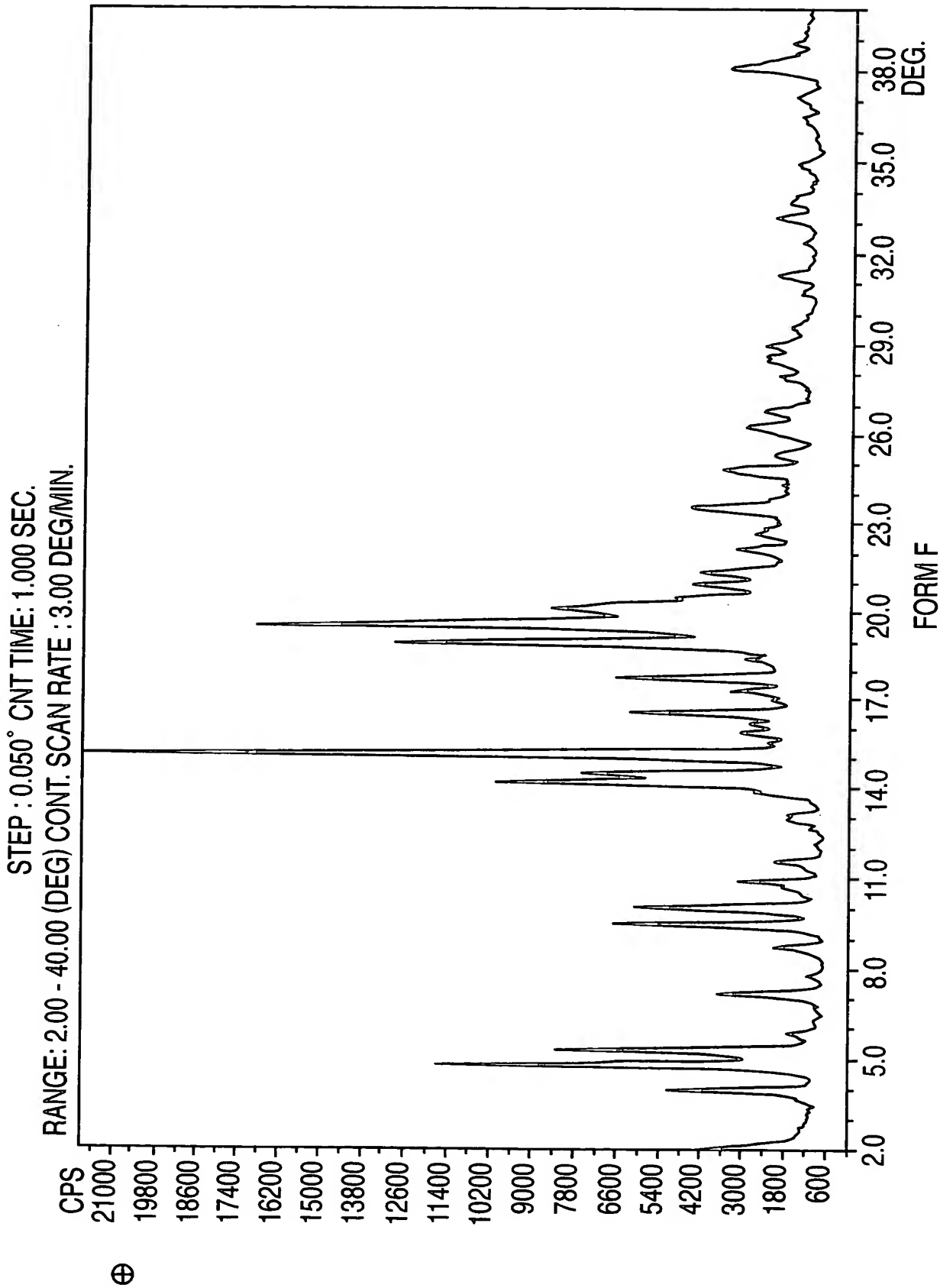

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
82000
78000
74000
70000
66000
62000
58000
54000
50000
46000
42000
38000
34000
30000
26000
22000
18000
14000
10000
6000
2000
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM D

FIG. 3


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
12950
12250
11550
10850
10150
9450
8750
8050
7350
6650
5950
5250
4550
3850
3150
2450
1750
1050
350
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM E

FIG. 4


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
21000
19800
18600
17400
16200
15000
13800
12600
11400
10200
9000
7800
6600
5400
4200
3000
1800
600
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM F

FIG. 5

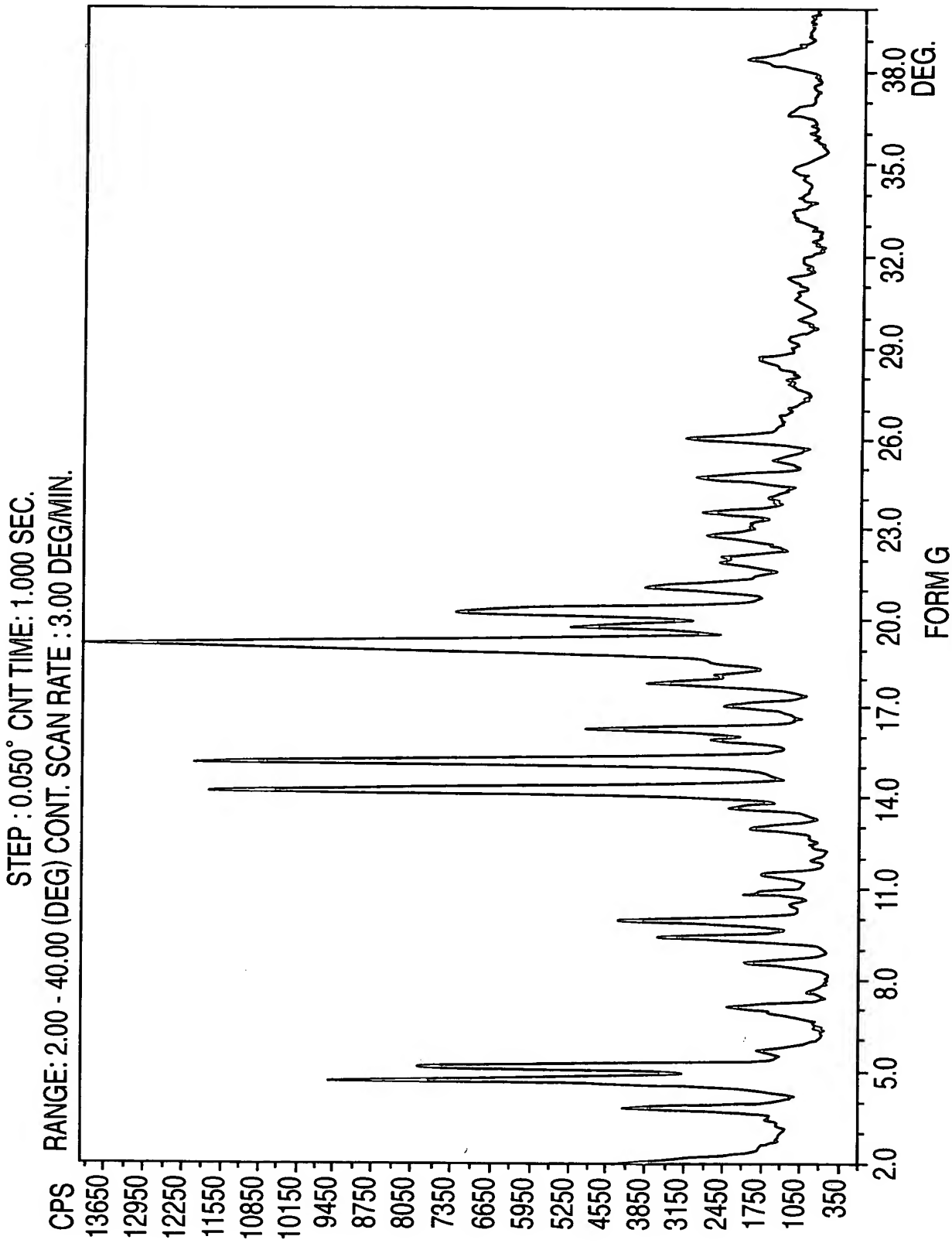
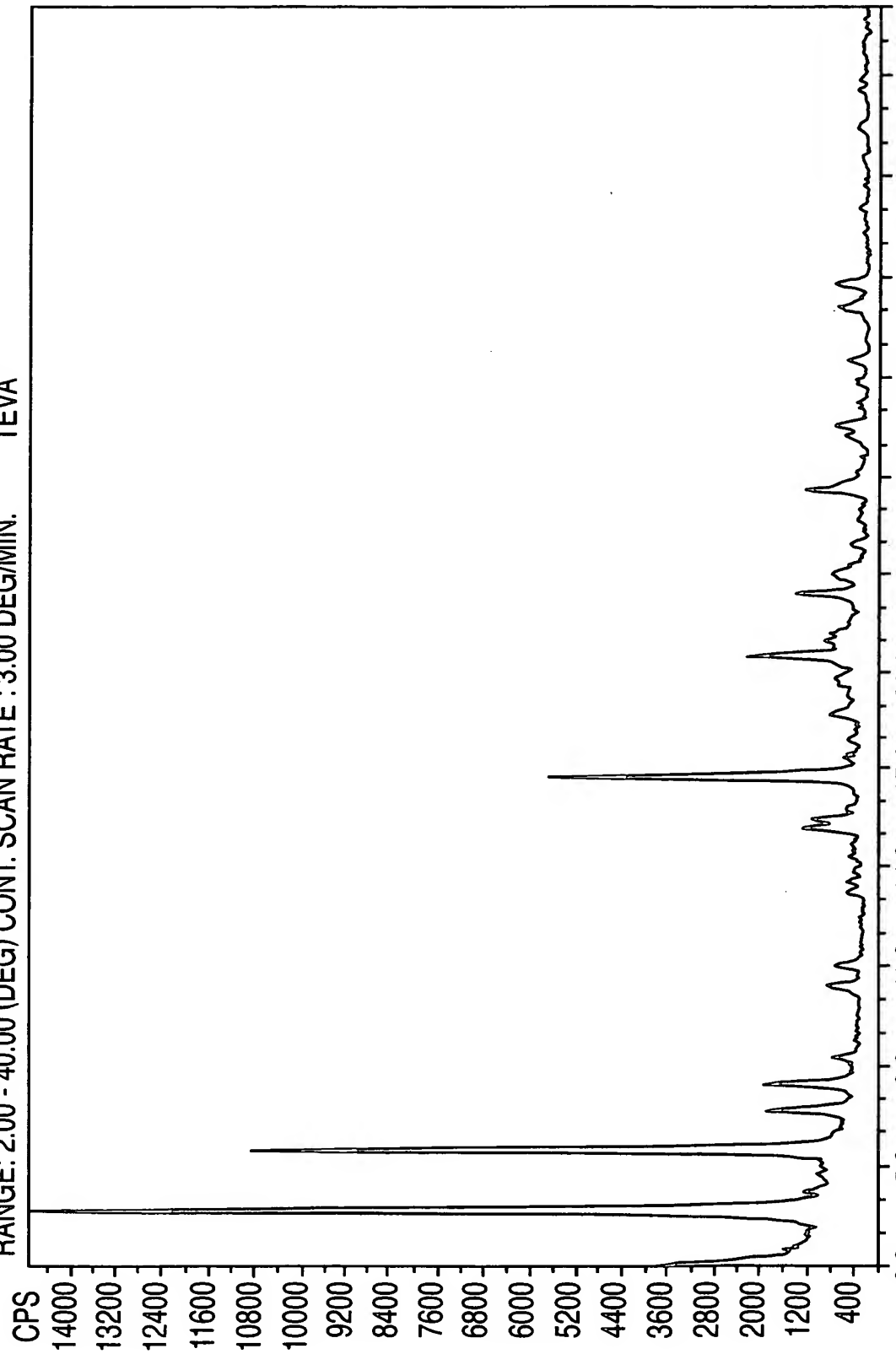
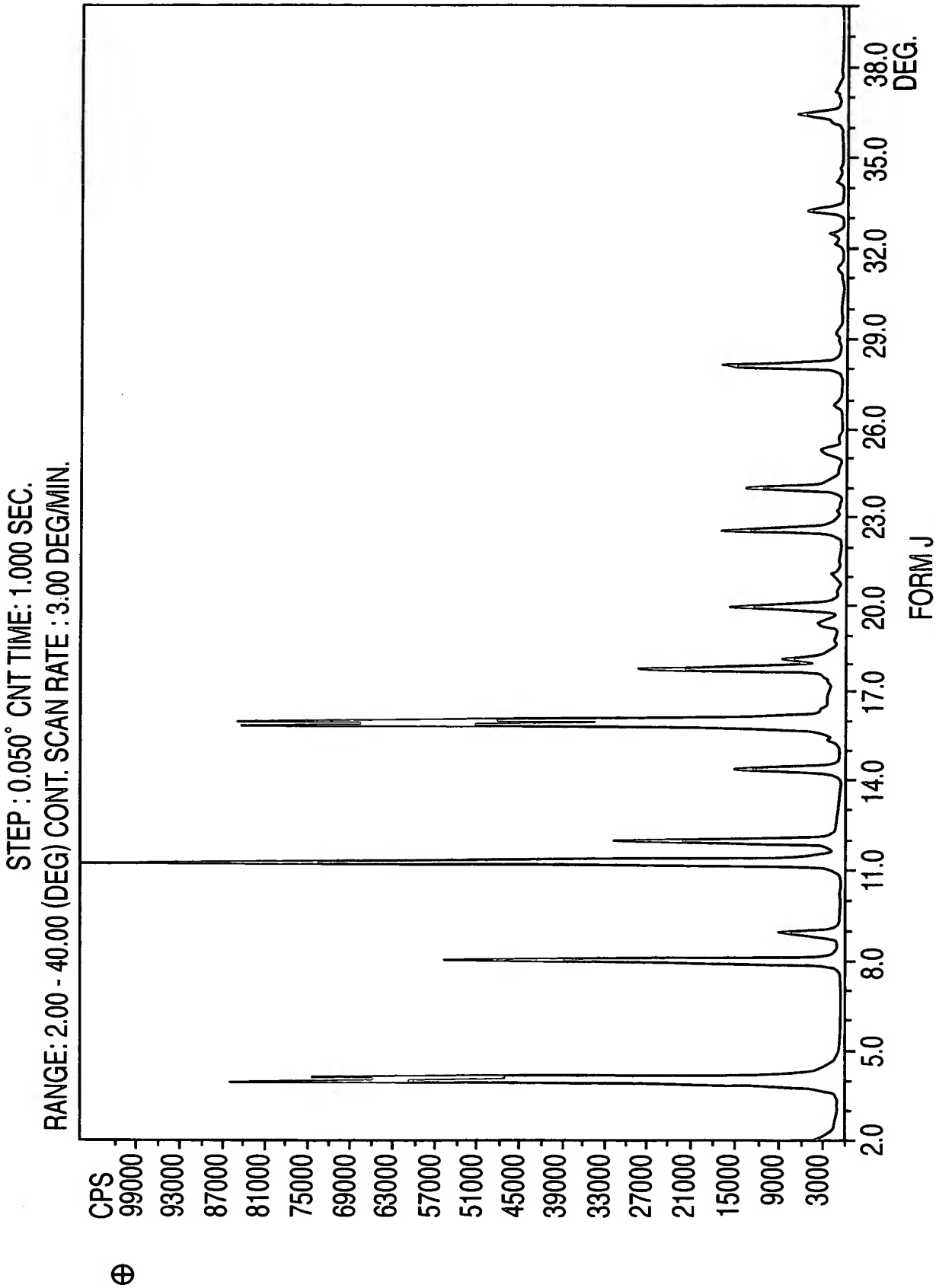

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
13650
12950
12250
11550
10850
10150
9450
8750
8050
7350
6650
5950
5250
4550
3850
3150
2450
1750
1050
350
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM G

FIG. 6


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
14000
13200
12400
11600
10800
10000
9200
8400
7600
6800
6000
5200
4400
3600
2800
2000
1200
400
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM I

FIG. 7


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
99000
93000
87000
81000
75000
69000
63000
57000
51000
45000
39000
33000
27000
21000
15000
9000
3000
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM J

FIG. 8

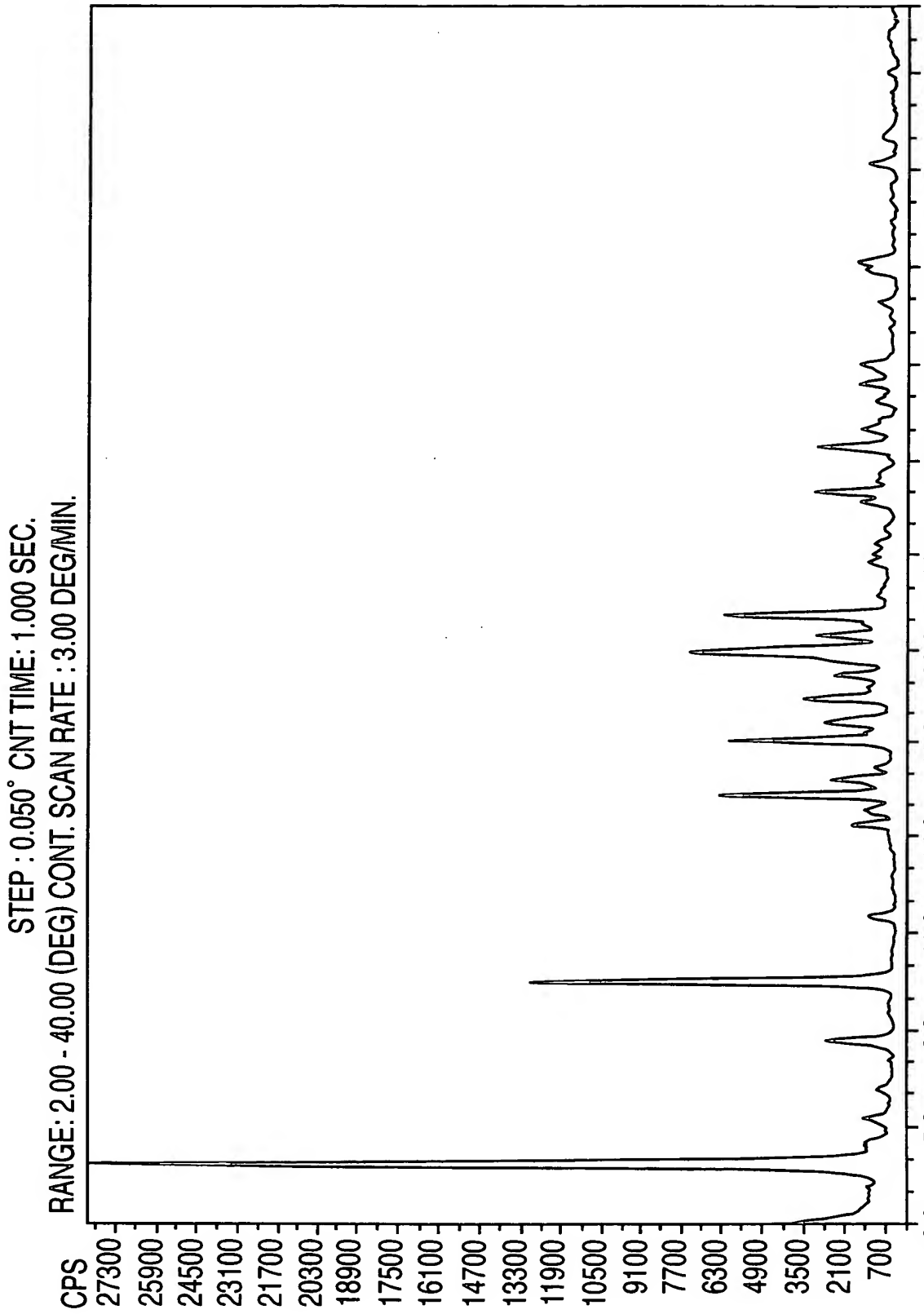
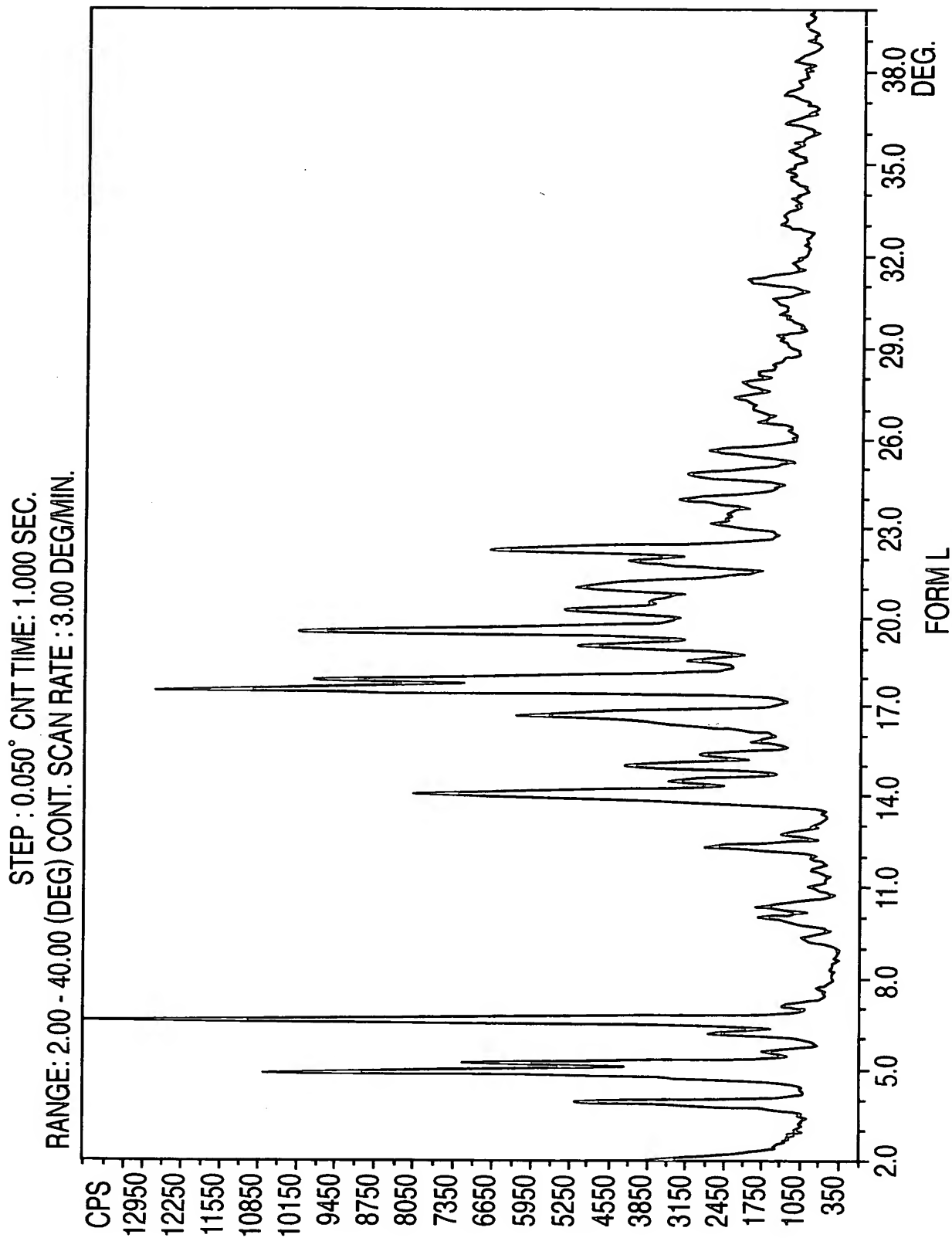
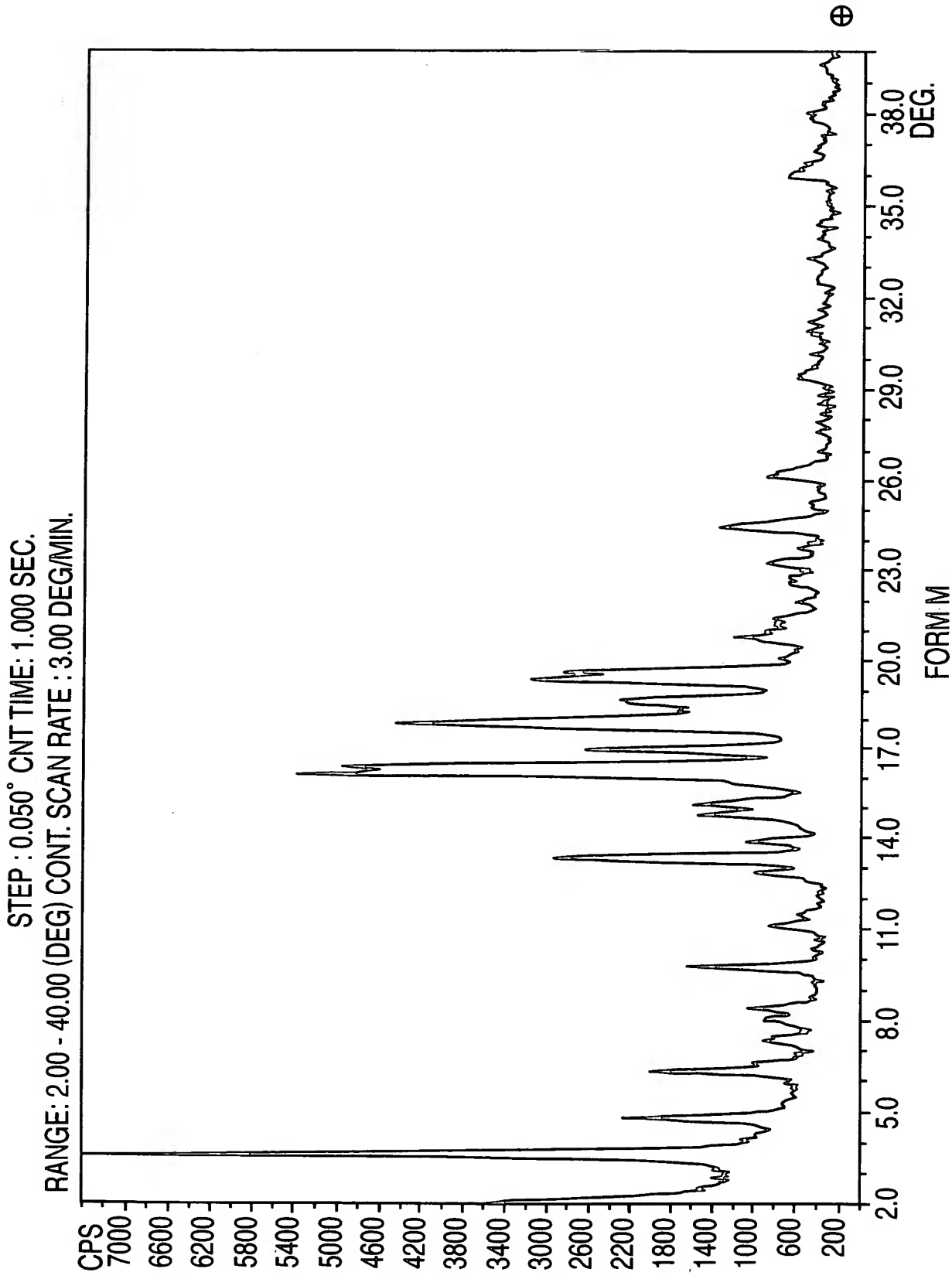

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
27300
25900
24500
23100
21700
20300
18900
17500
16100
14700
13300
11900
10500
9100
7700
6300
4900
3500
2100
700
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM K

FIG. 9


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
12950
12250
11550
10850
10150
9450
8750
8050
7350
6650
5950
5250
4550
3850
3150
2450
1750
1050
350
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM L

FIG. 10


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
7000
6600
6200
5800
5400
5000
4600
4200
3800
3400
3000
2600
2200
1800
1400
1000
600
200
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM M

FIG. 11

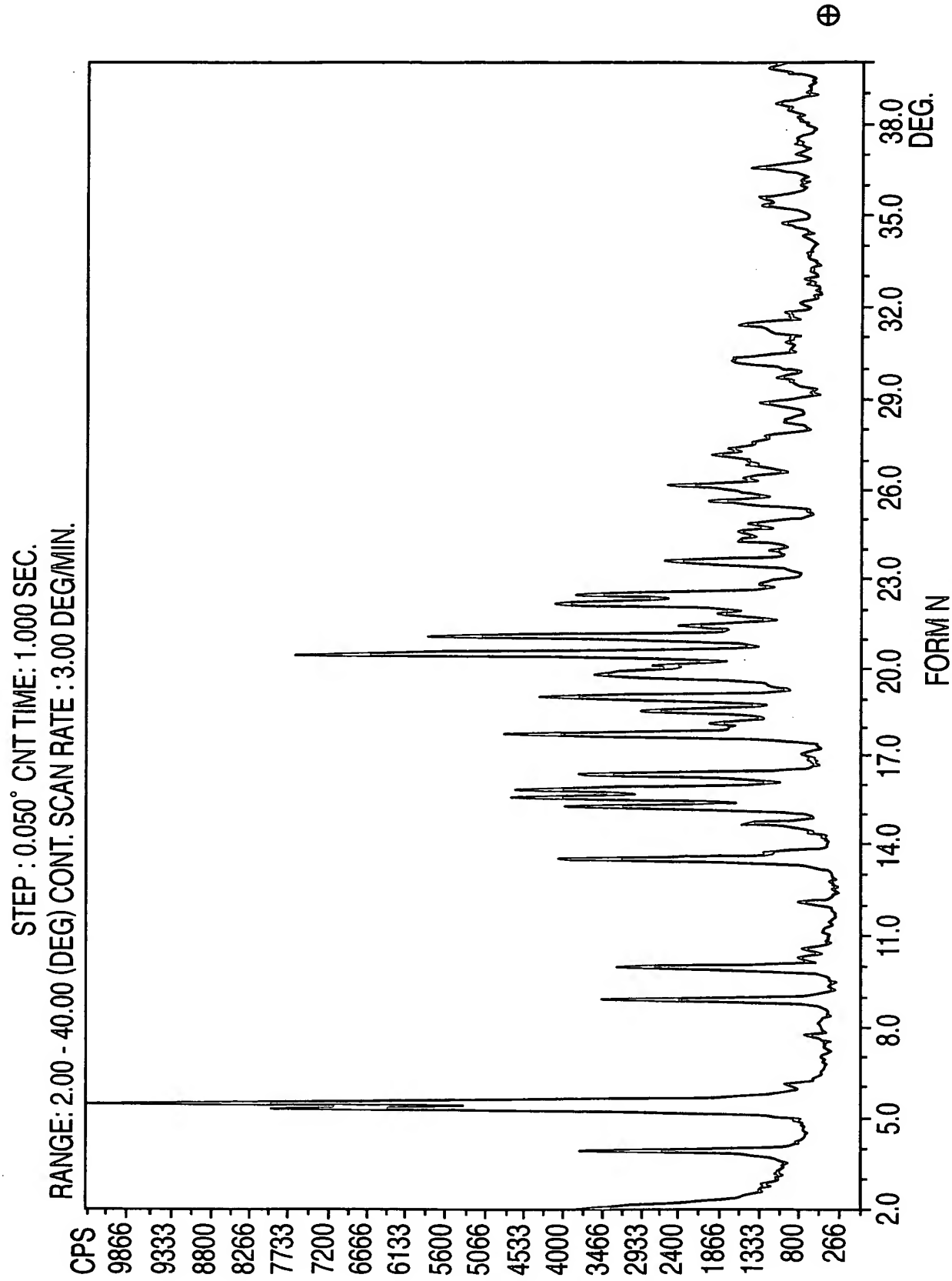

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
9866
9333
8800
8266
7733
7200
6666
6133
5600
5066
4533
4000
3466
2933
2400
1866
1333
800
266
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM N

FIG. 12

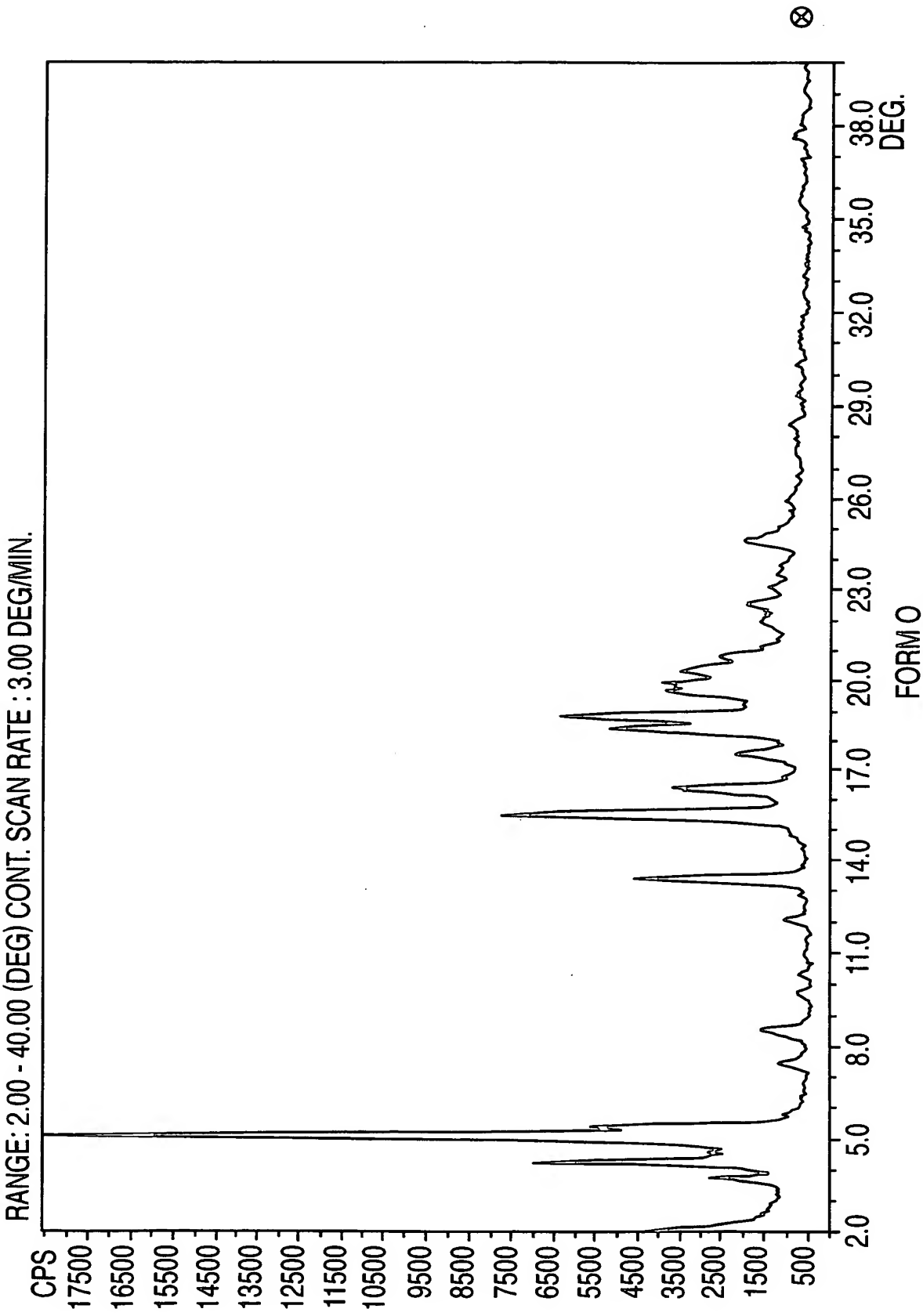

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
17500
16500
15500
14500
13500
12500
11500
10500
9500
8500
7500
6500
5500
4500
3500
2500
1500
500
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM O

FIG. 13

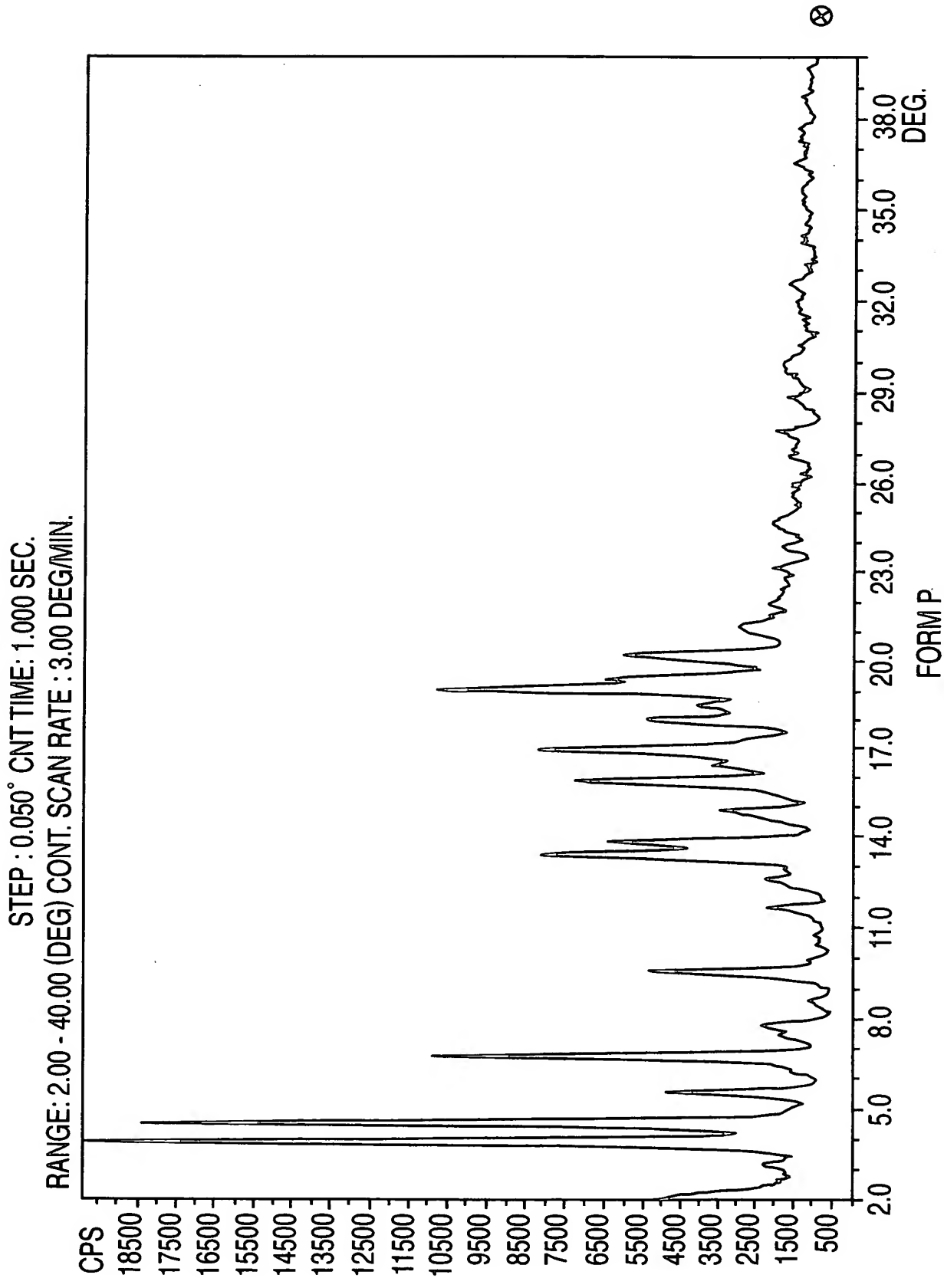

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
18500
17500
16500
15500
14500
13500
12500
11500
10500
9500
8500
7500
6500
5500
4500
3500
2500
1500
500
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM P

FIG. 14

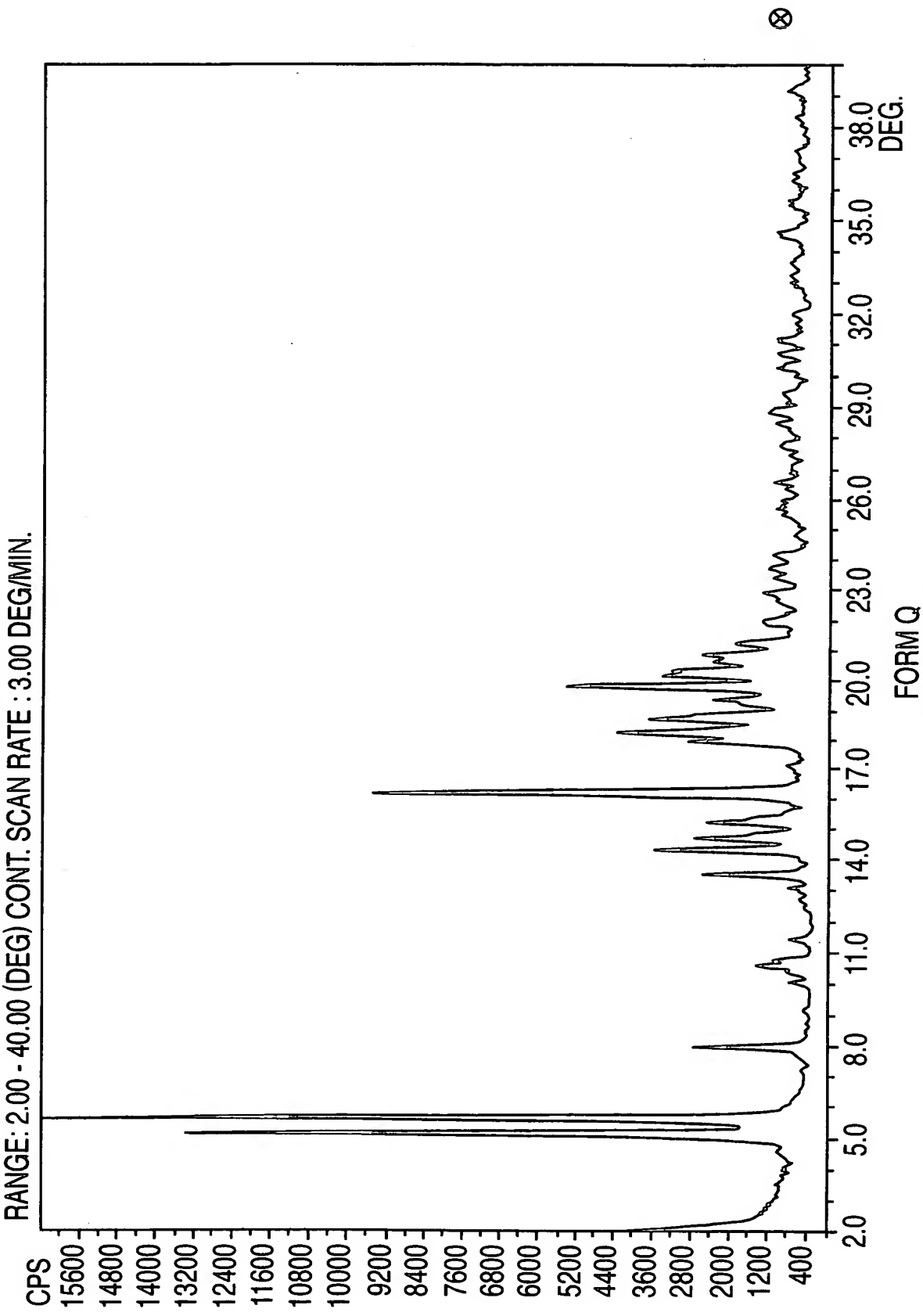
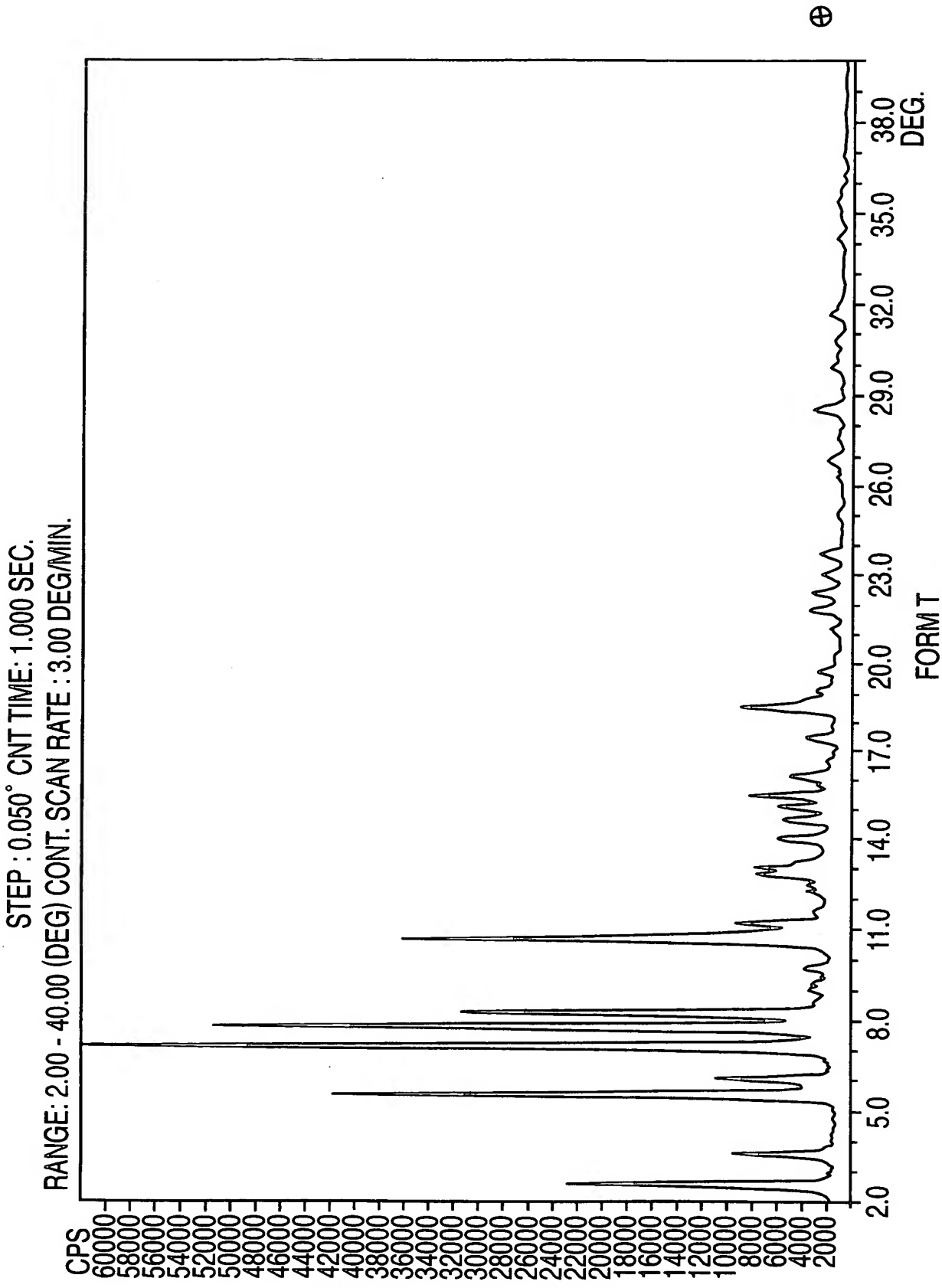
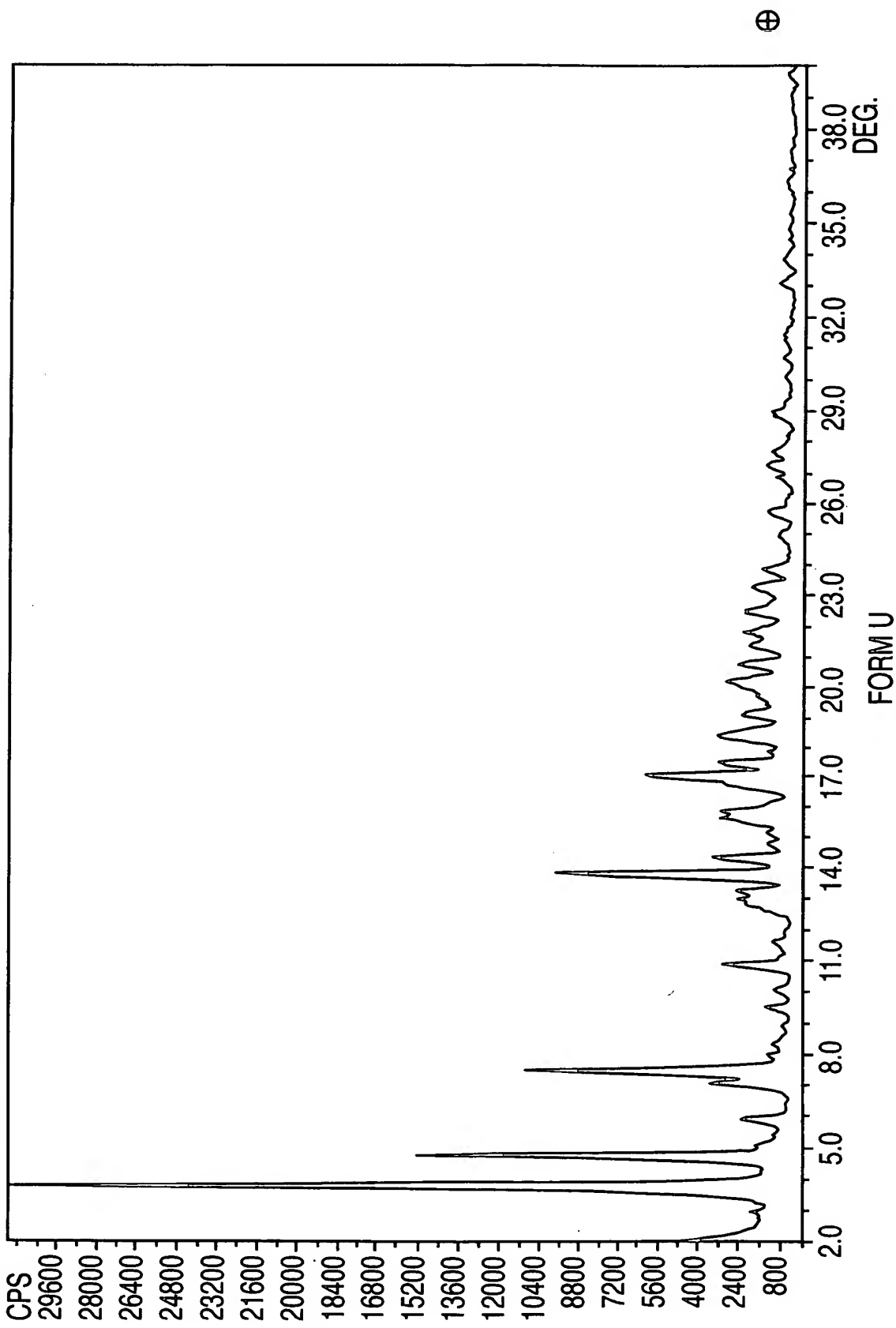

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
15600
14800
14000
13200
12400
11600
10800
10000
9200
8400
7600
6800
6000
5200
4400
3600
2800
2000
1200
400
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM Q

FIG. 15


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
60000
58000
56000
54000
52000
50000
48000
46000
44000
42000
40000
38000
36000
34000
32000
30000
28000
26000
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

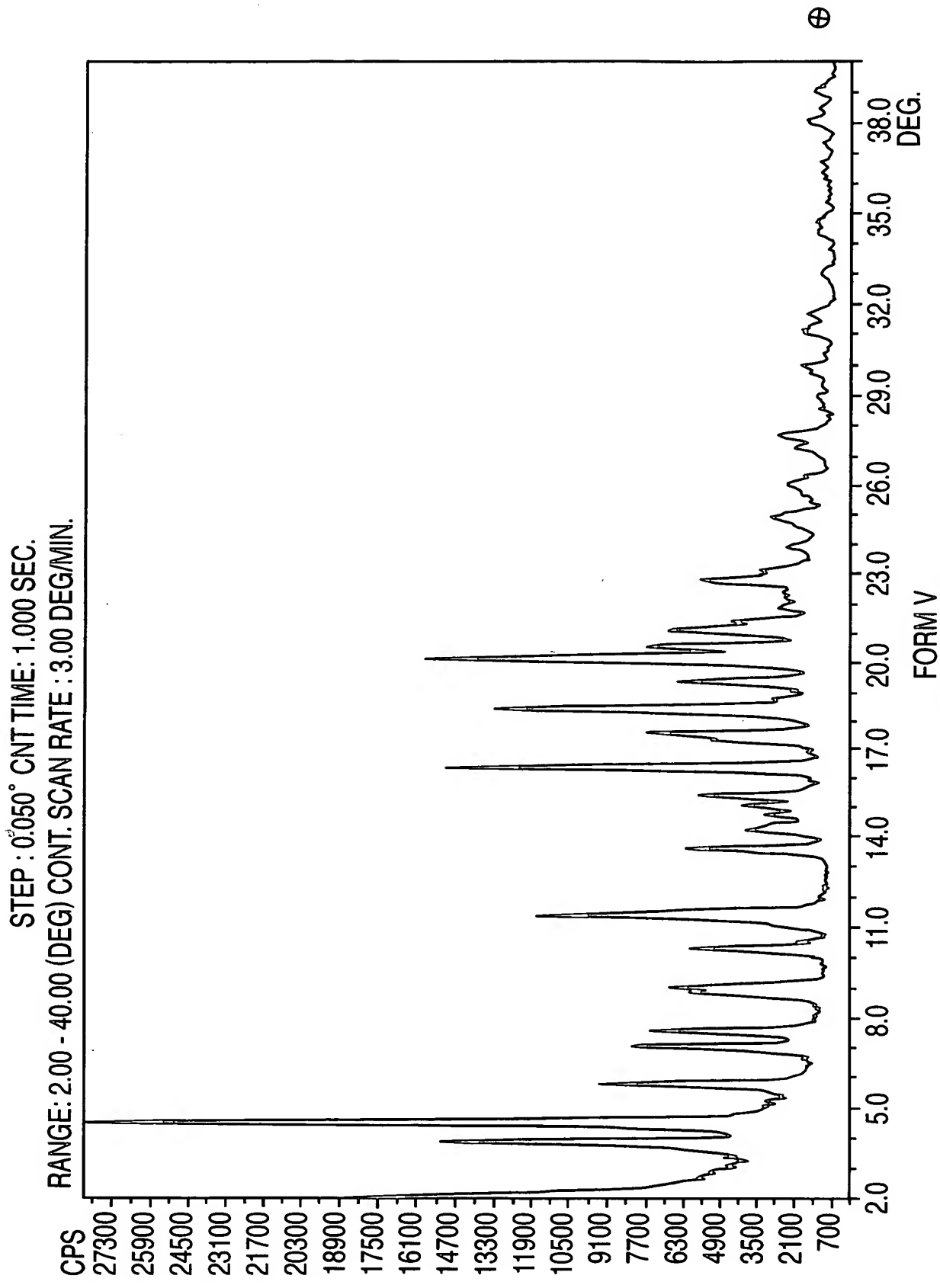
FORM T

FIG. 16


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
29600
28000
26400
24800
23200
21600
20000
18400
16800
15200
13600
12000
10400
8800
7200
5600
4000
2400
800
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

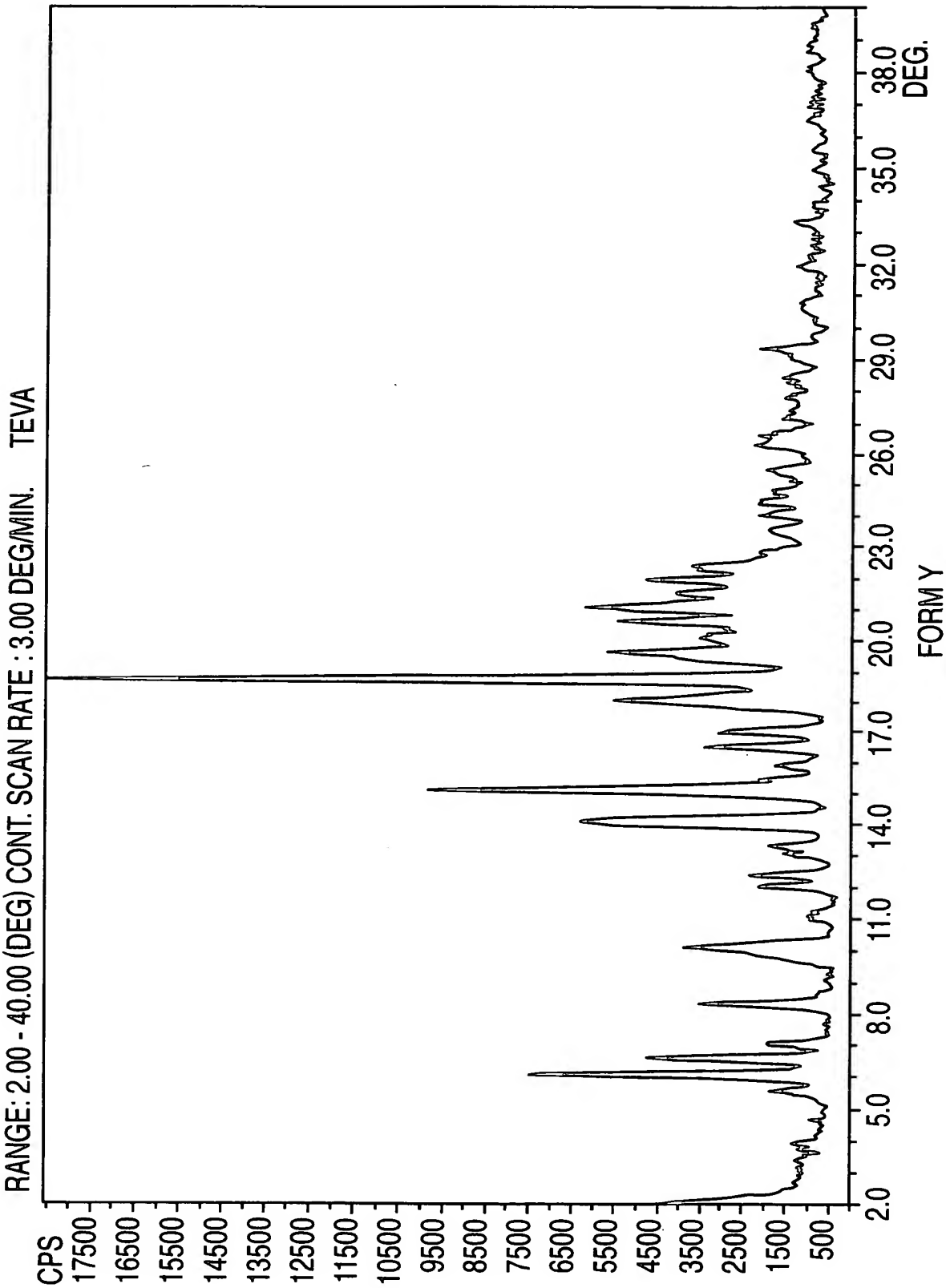
FORM U

FIG. 17


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
27300
25900
24500
23100
21700
20300
18900
17500
16100
14700
13300
11900
10500
9100
7700
6300
4900
3500
2100
700
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM V

FIG. 18


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
17500
16500
15500
14500
13500
12500
11500
10500
9500
8500
7500
6500
5500
4500
3500
2500
1500
500
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM Y

FIG. 19

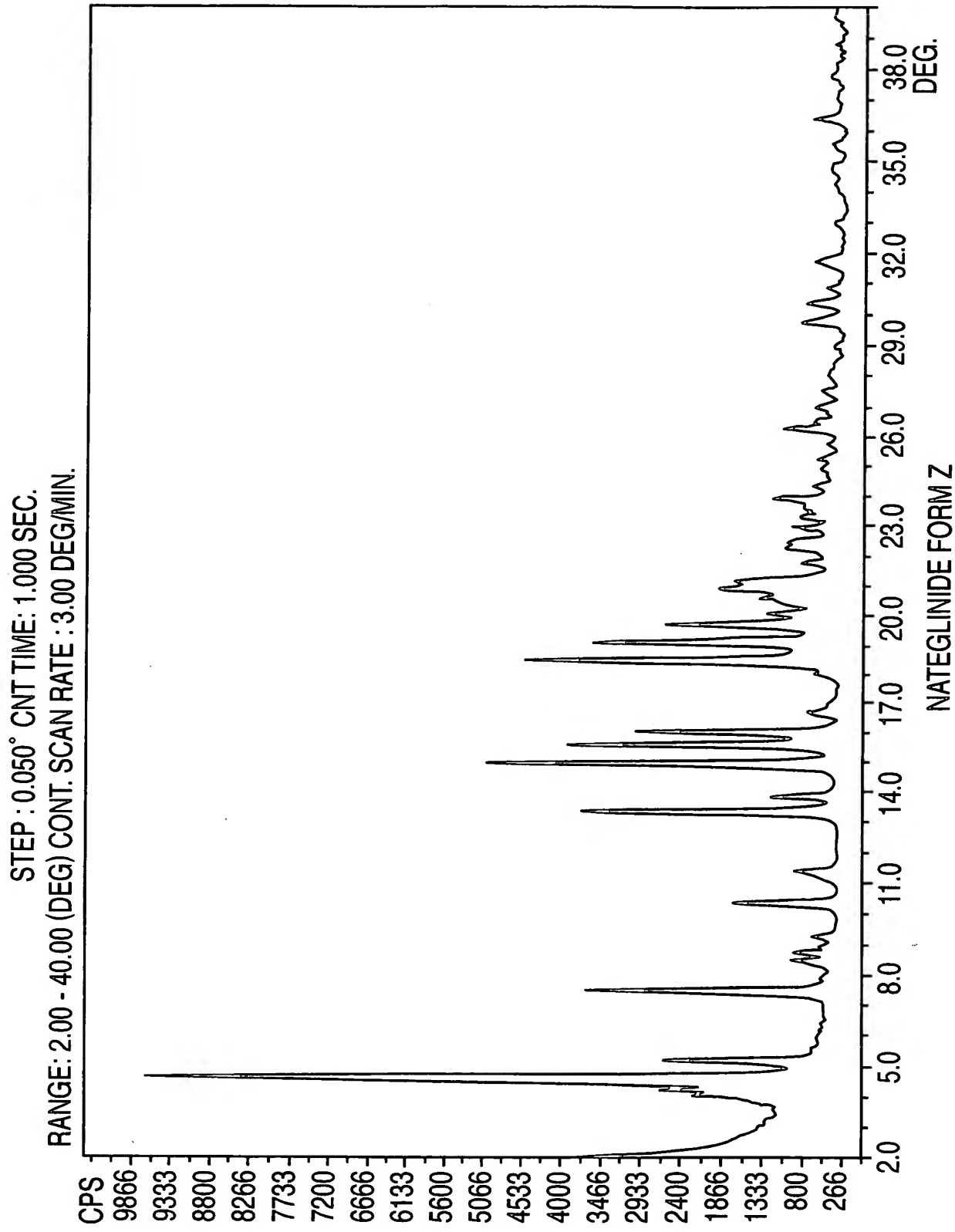

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
9866
9333
8800
8266
7733
7200
6666
6133
5600
5066
4533
4000
3466
2933
2400
1866
1333
800
266
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
NATEGLINIDE FORM Z

FIG. 20

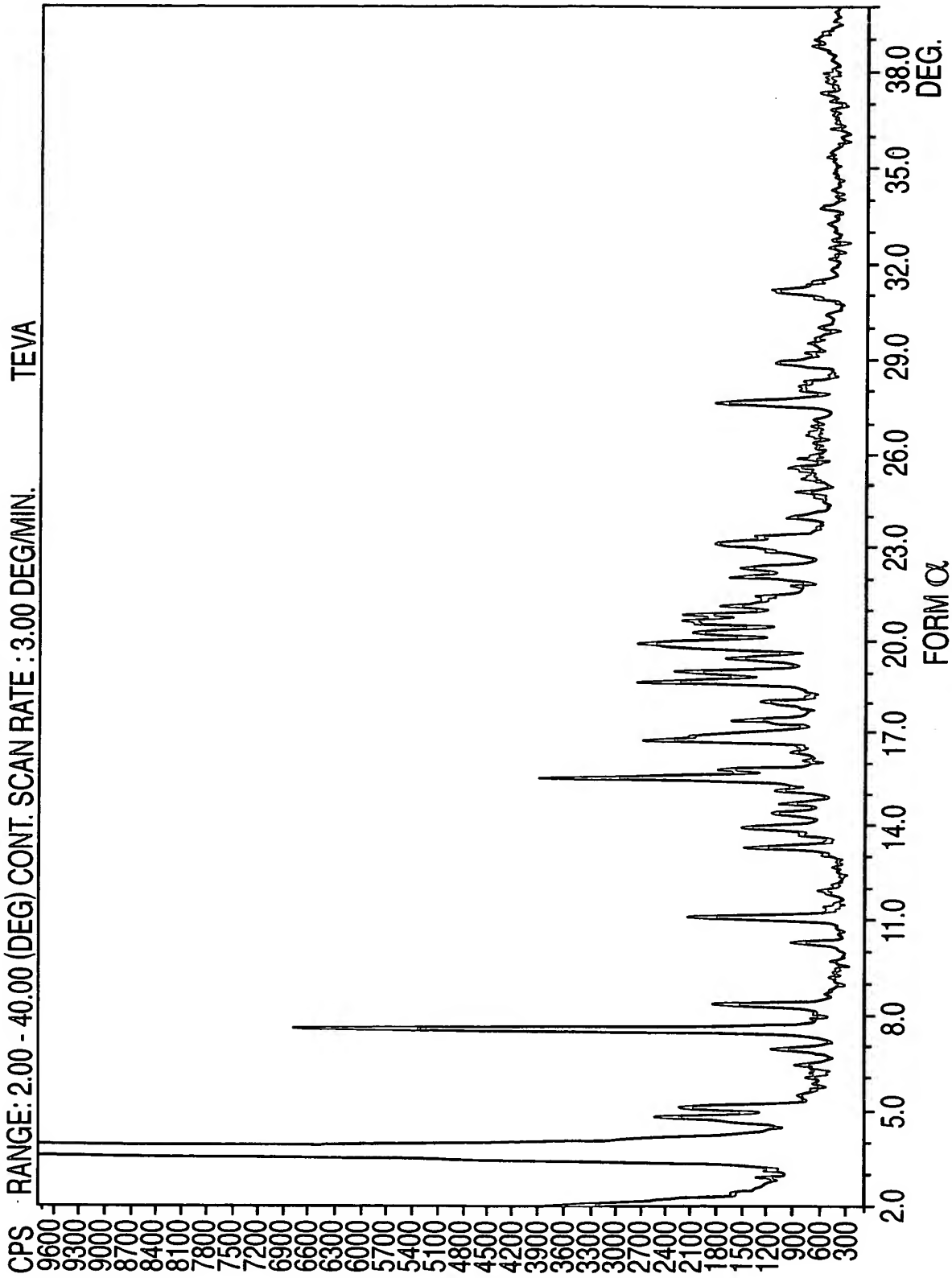

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
TEVA
CPS
9600
9300
9000
8700
8400
8100
7800
7500
7200
6900
6600
6300
6000
5700
5400
5100
4800
4500
4200
3900
3600
3300
3000
2700
2400
2100
1800
1500
1200
900
600
300
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM α

FIG. 21

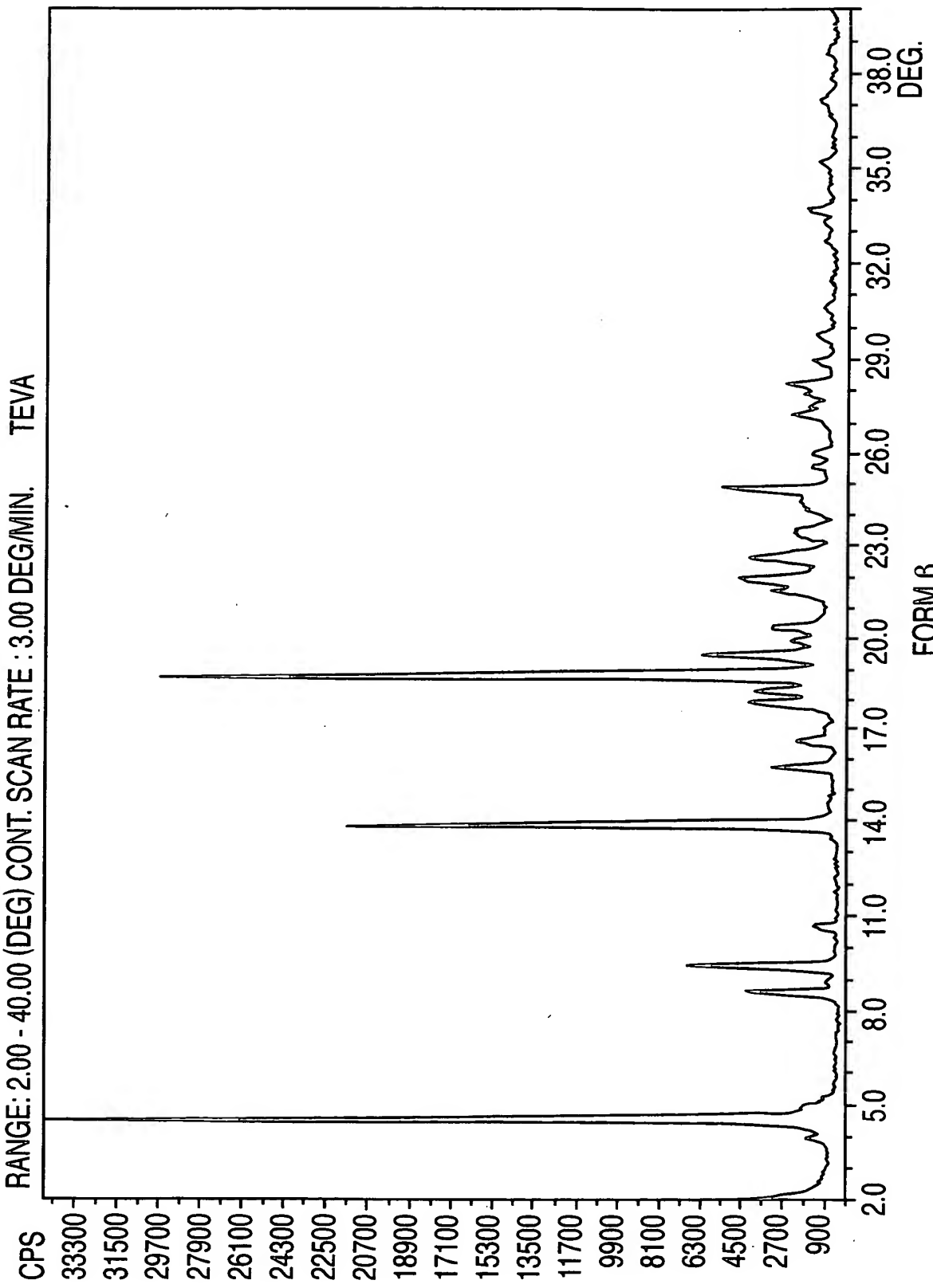

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
33300
31500
29700
27900
26100
24300
22500
20700
18900
17100
15300
13500
11700
9900
8100
6300
4500
2700
900
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM β

FIG. 22

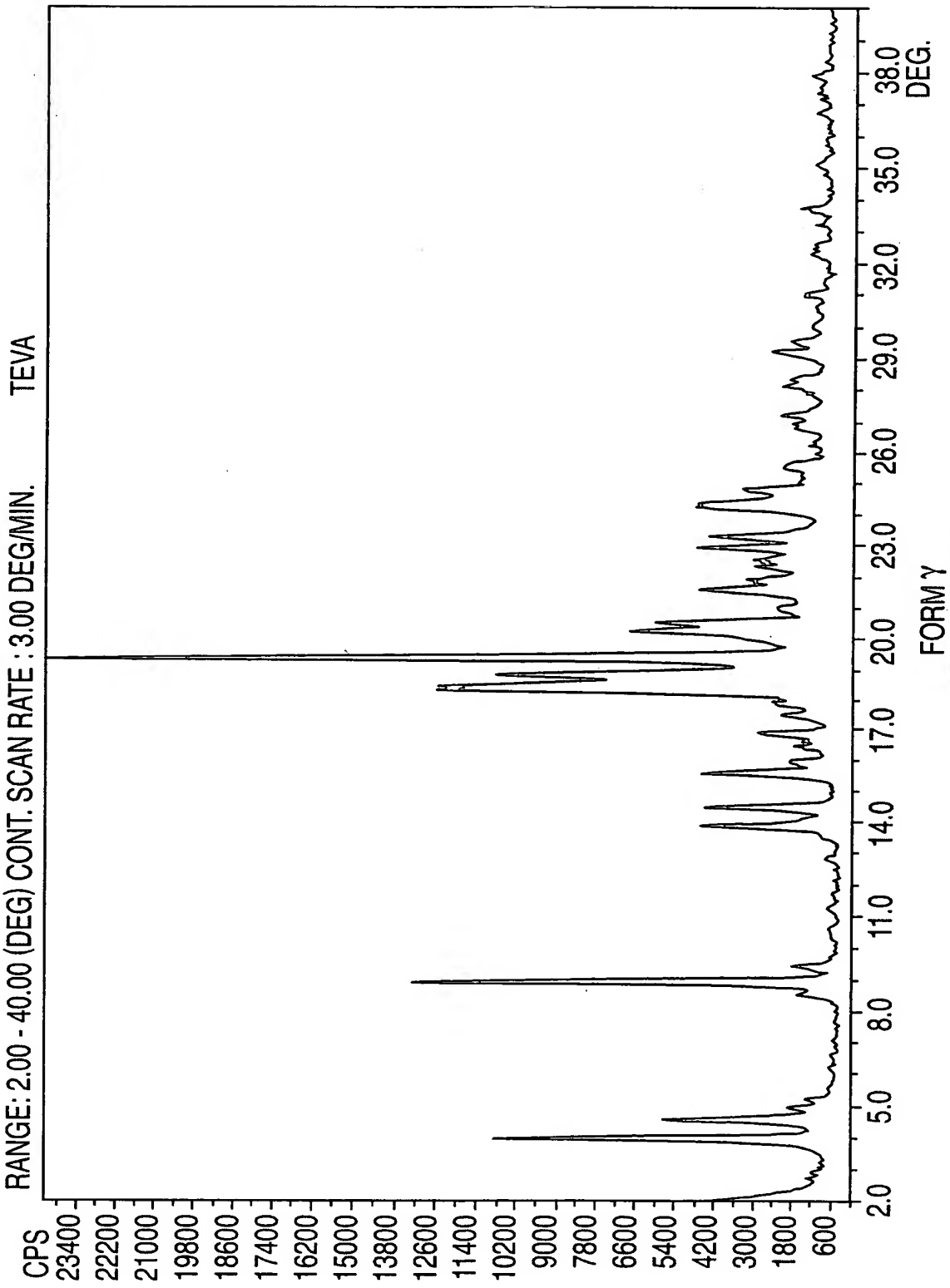

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
TEVA
CPS
23400
22200
21000
19800
18600
17400
16200
15000
13800
12600
11400
10200
9000
7800
6600
5400
4200
3000
1800
600
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM Y

FIG. 23

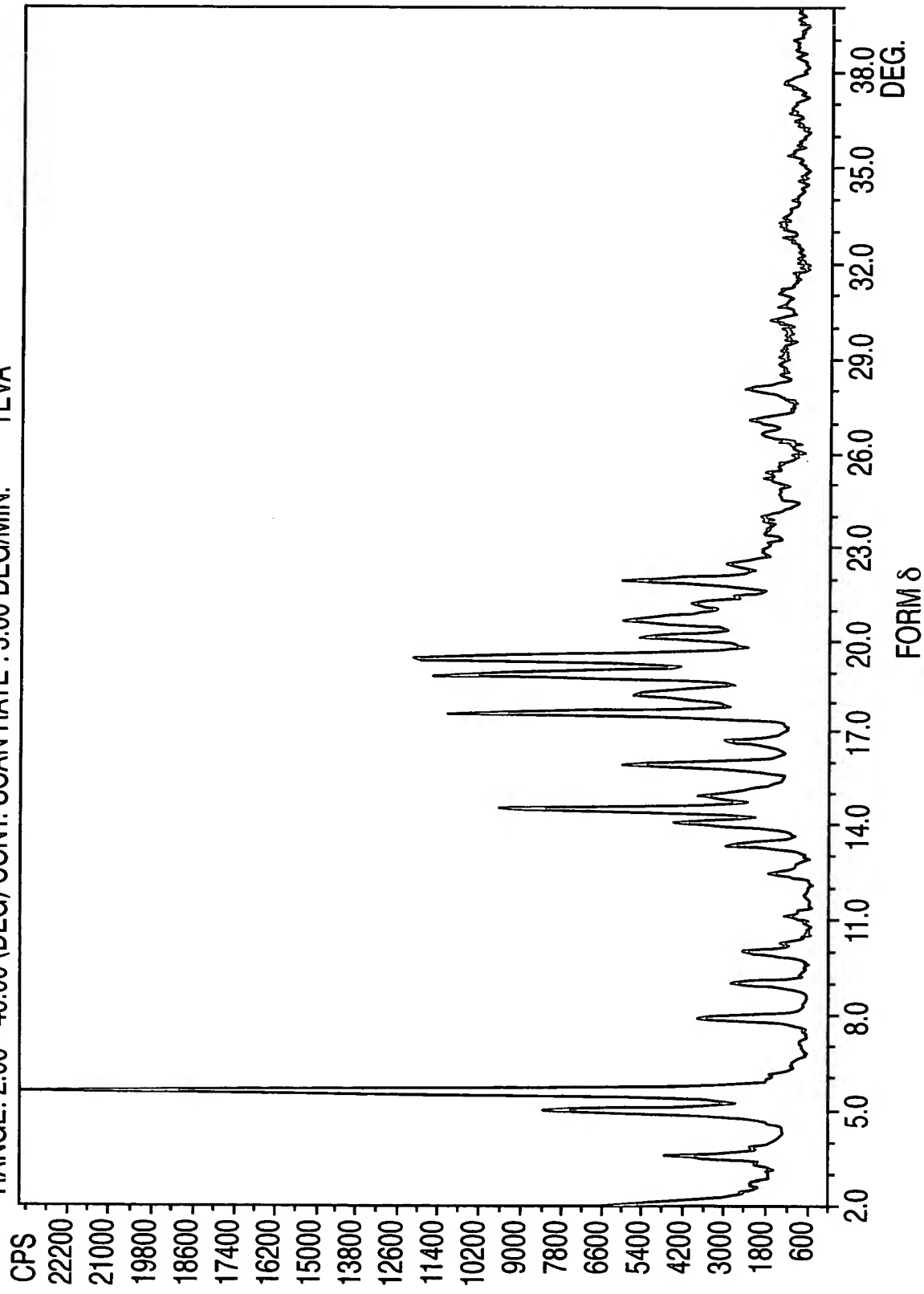
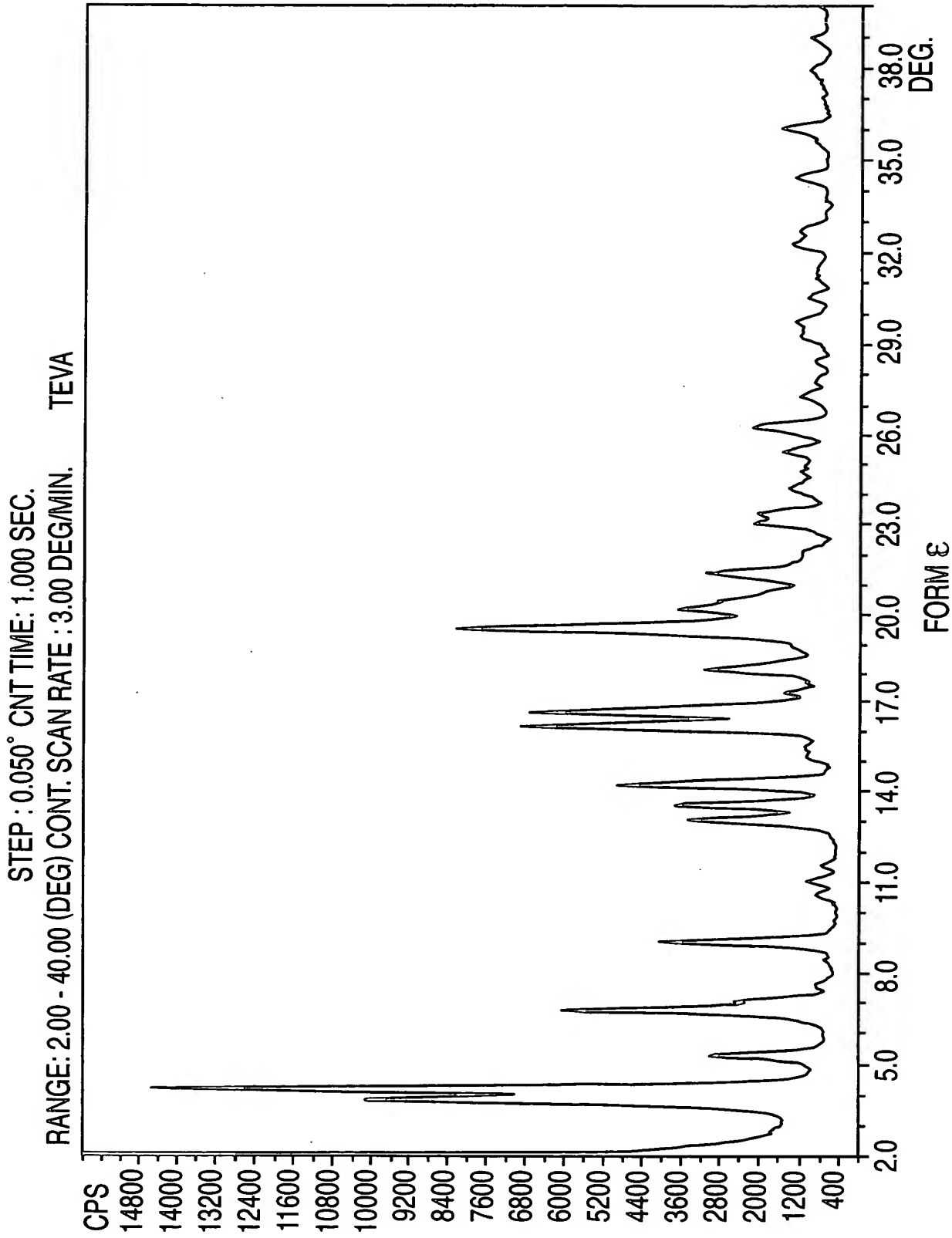

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
22200
21000
19800
18600
17400
16200
15000
13800
12600
11400
10200
9000
7800
6600
5400
4200
3000
1800
600
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM δ

FIG. 24


STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA
CPS
14800
14000
13200
12400
11600
10800
10000
9200
8400
7600
6800
6000
5200
4400
3600
2800
2000
1200
400
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.

FORM ε

FIG. 25

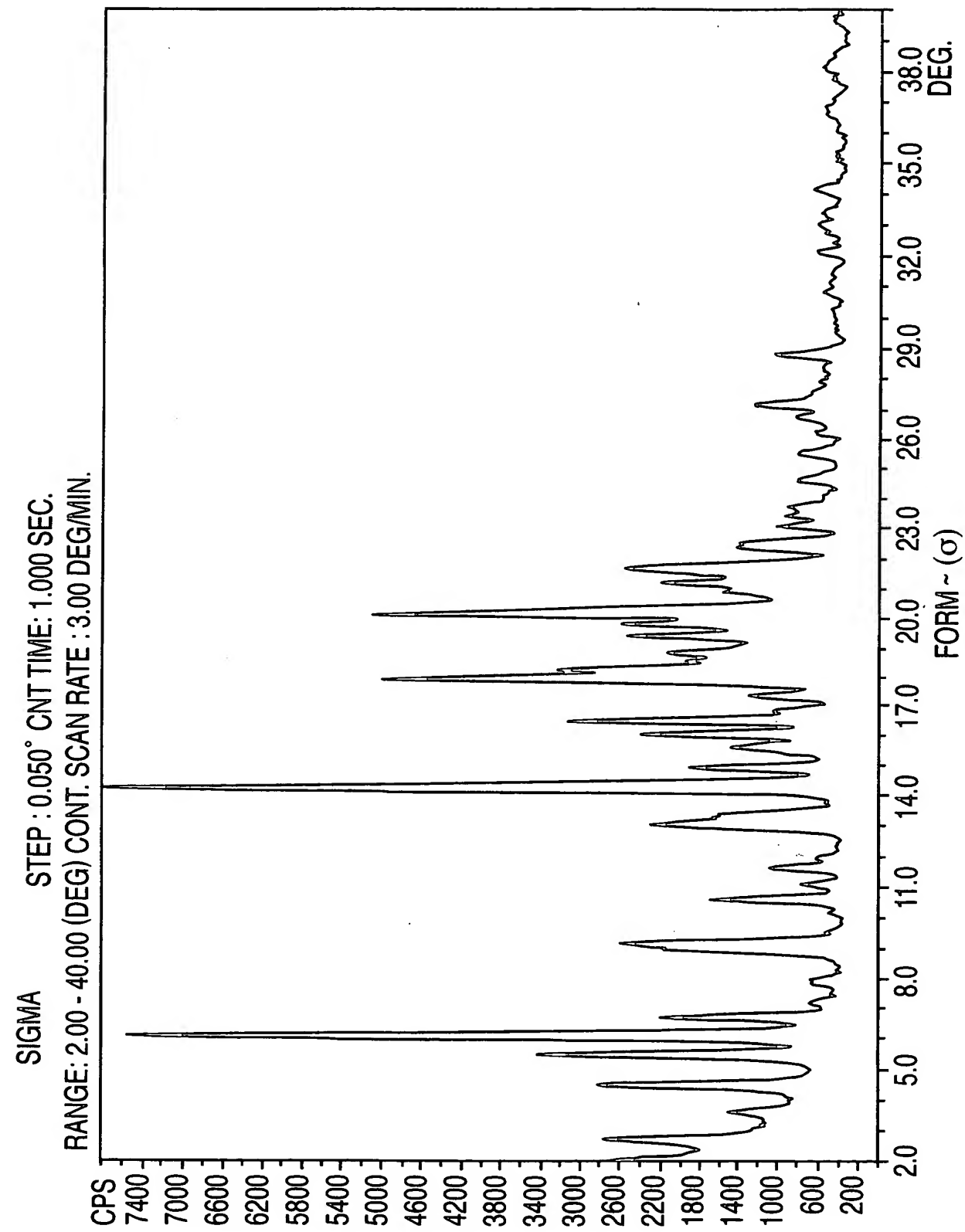

SIGMA
STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
7400
7000
6600
6200
5800
5400
5000
4600
4200
3800
3400
3000
2600
2200
1800
1400
1000
600
200
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM ~ (σ)

FIG. 26

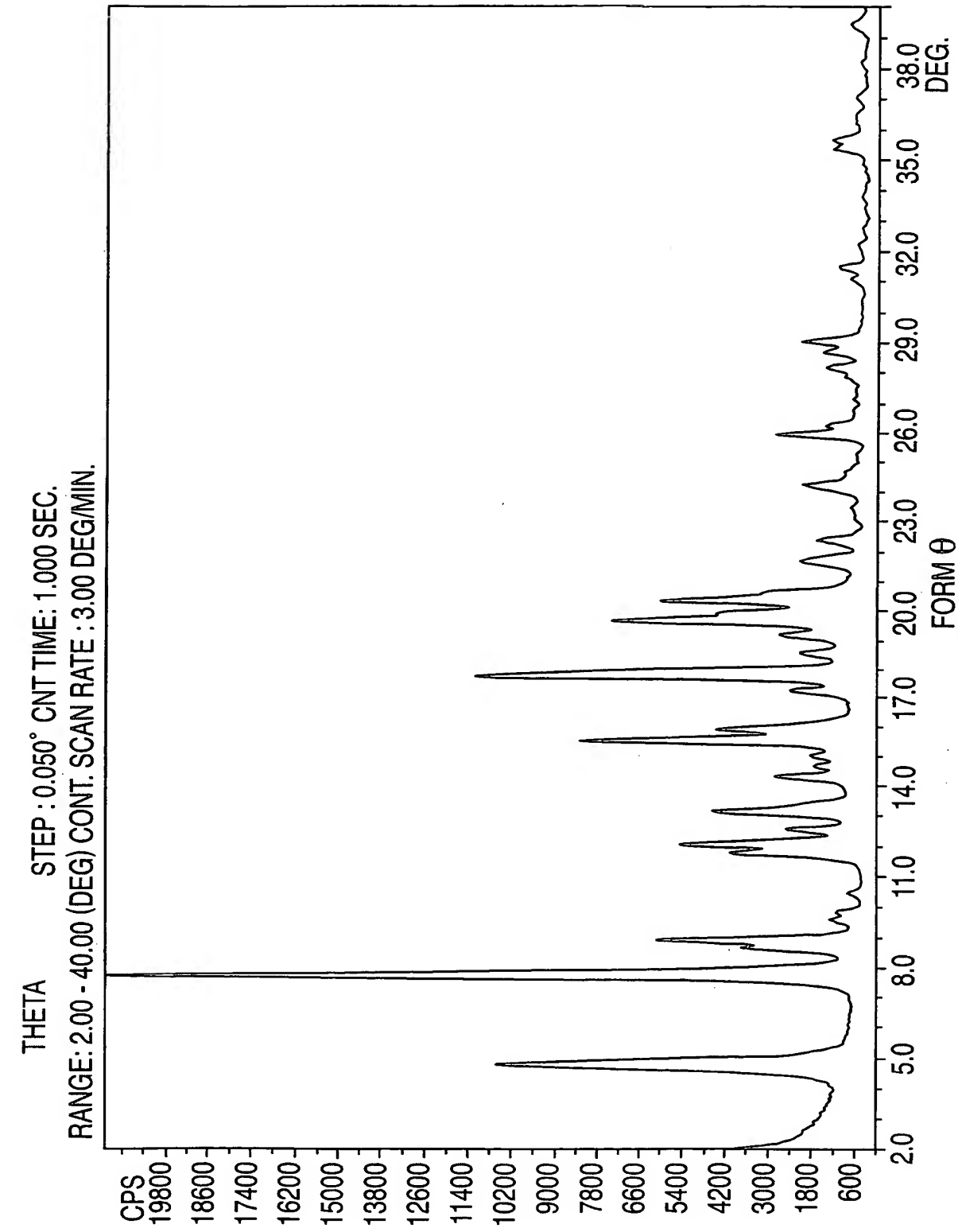
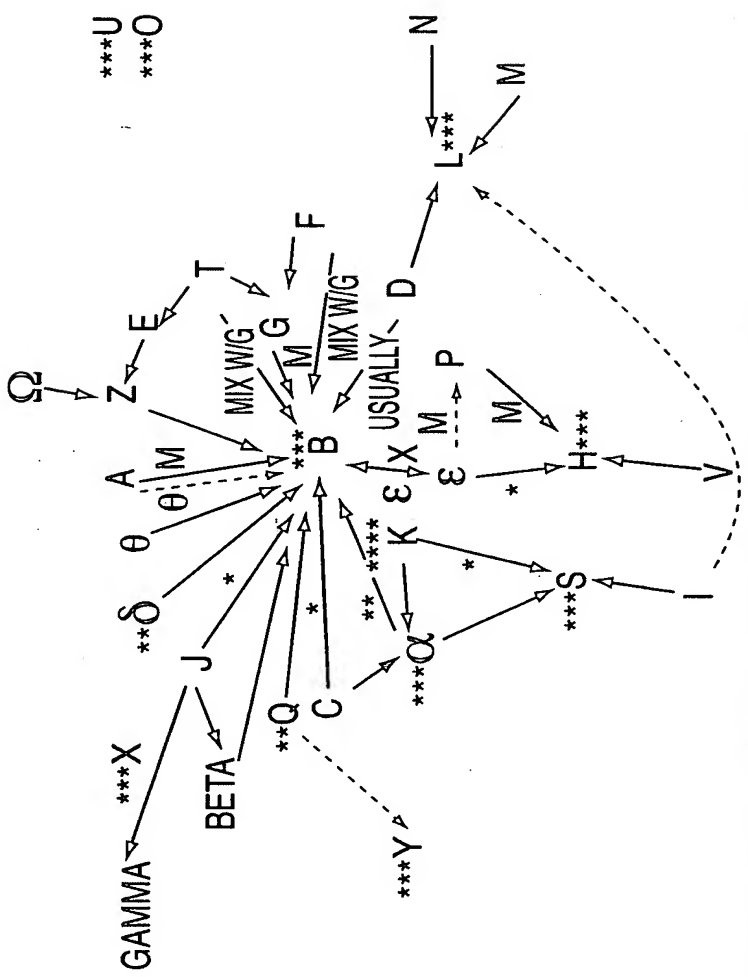

THETA
STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.
CPS
19800
18600
17400
16200
15000
13800
12600
11400
10200
9000
7800
6600
5400
4200
3000
1800
600
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
32.0
35.0
38.0
DEG.
FORM θ

FIG. 27



* TRANSFORMATION MAY PROCEED THROUGH ANOTHER TERM.

** THERMALLY STABLE AT LOWER HEATING TEMPERATURES (~50°C).

*** THERMALLY STABLE FORMS.

----→ TRANSFORMATION AFTER STORAGE AT ROOM TEMPERATURE.

m MIXTURE WITH STARTING FORM.

**** WHEN STARTING MATERIAL CONTAINS SEEDS.

sol RESULTS MIGHT VARY DEPENDING ON THE SOLVATE OF FORM EPSILON USED.

THERMAL STABILITY CHART

FIG. 28

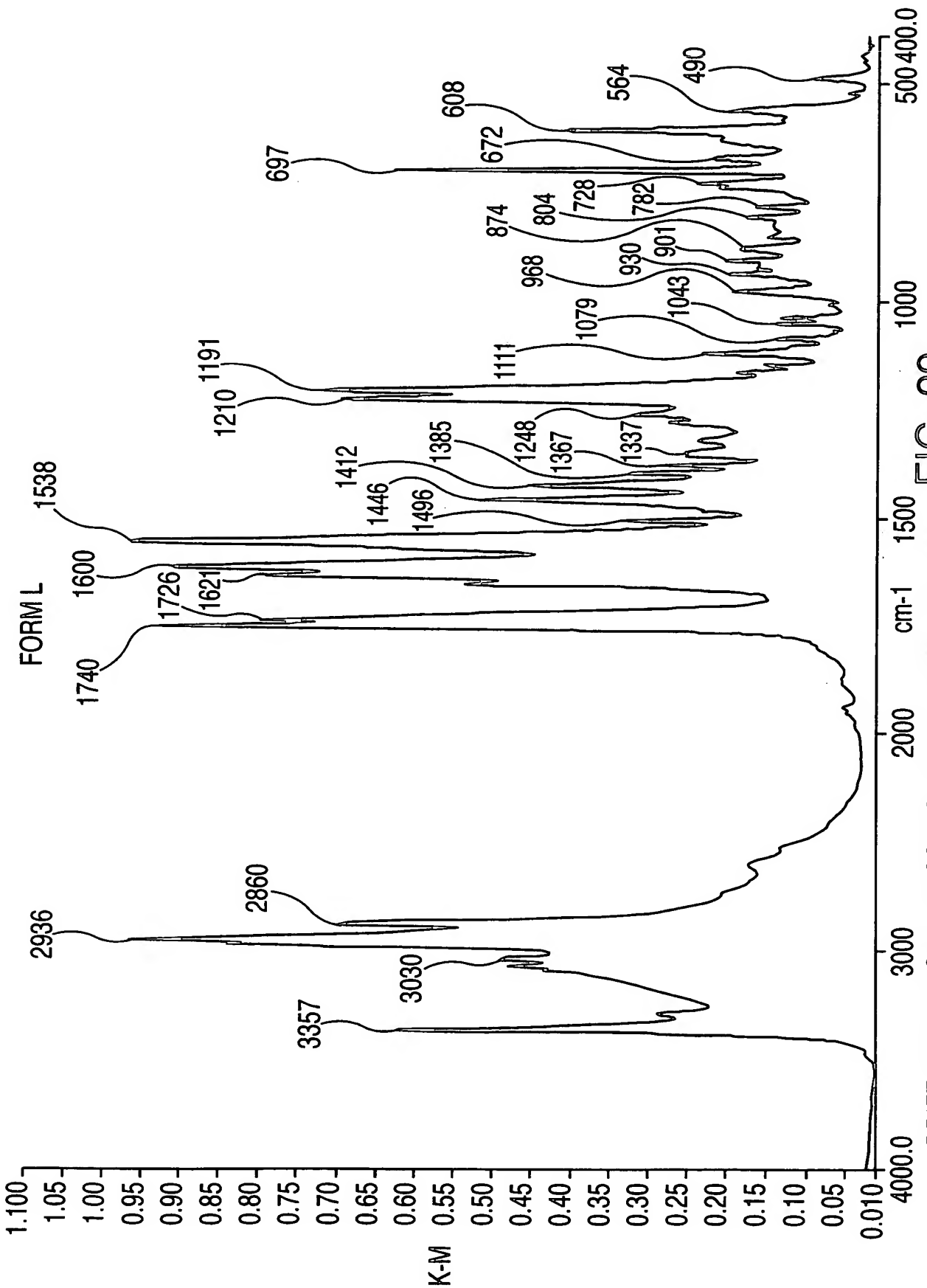

FORM L
K-M
cm-1
-DRIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.00 cm-1
4000.0
3000
2000
1500
1000
500
400.0
1.100
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.010
2936
2860
3030
3357
1740
1726
1621
1600
1538
1496
1446
1412
1385
1367
1337
1248
1210
1191
1111
1079
1043
968
930
901
874
804
782
728
697
672
608
564
490

FIG. 29

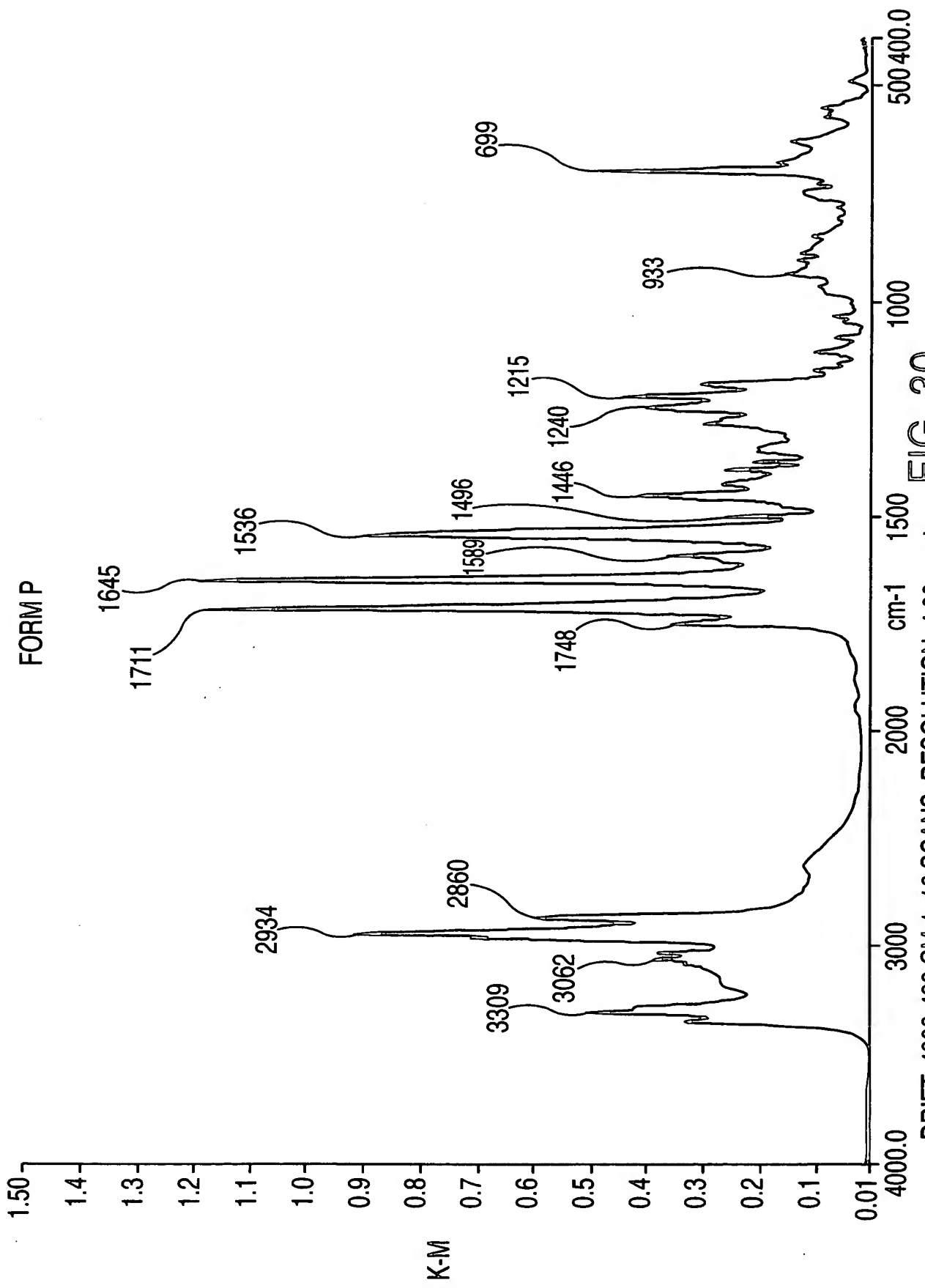

FORM P
K-M
1.50
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.01
4000.0
3000
2000
1500
1000
500
400.0
cm-1
-DRIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.00 cm-1
3309
3062
2934
2860
1748
1711
1645
1589
1536
1496
1446
1240
1215
933
699

FIG. 30

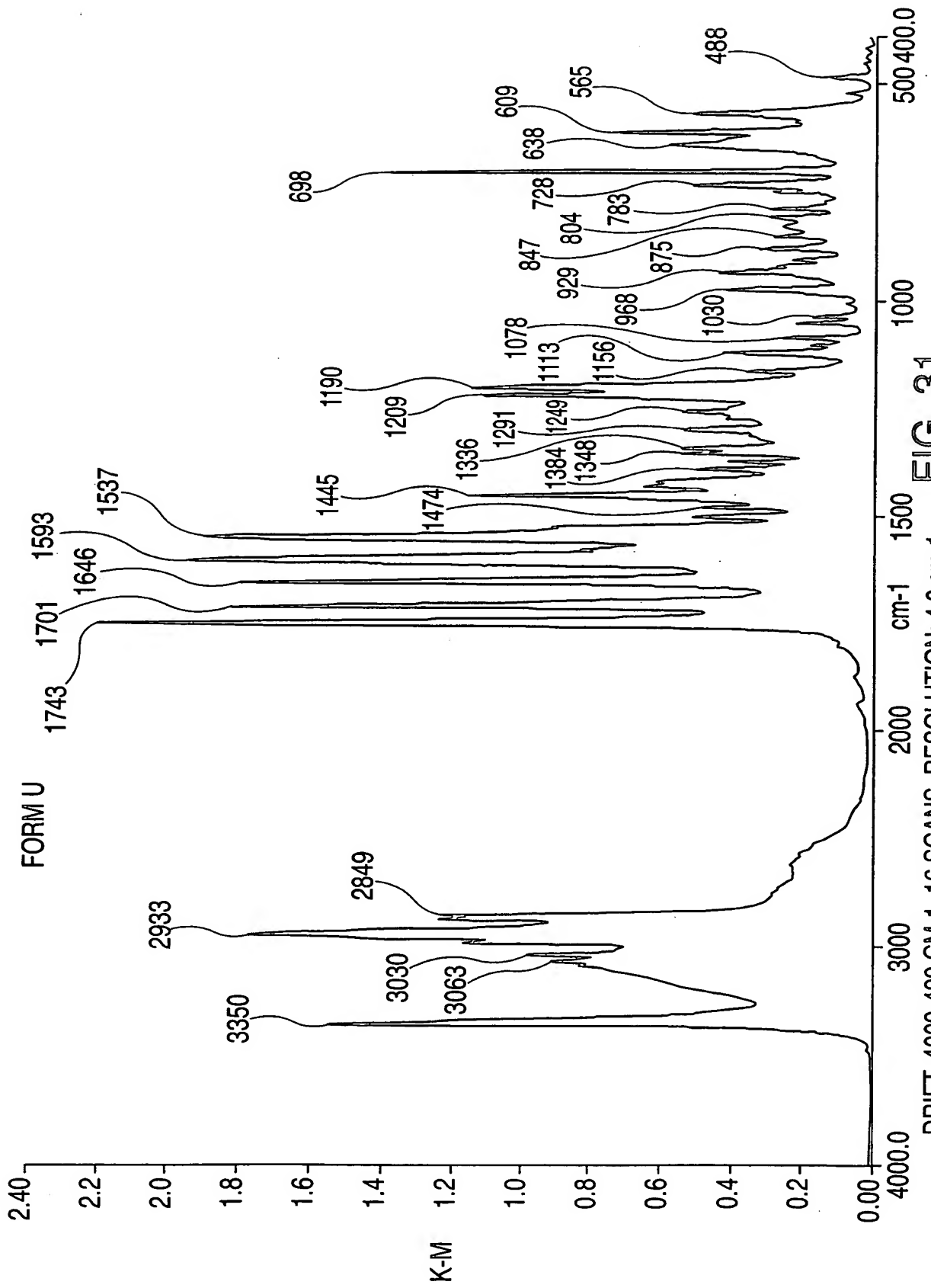

FORM U
-DRIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.0 cm-1
K-M
cm-1
4000.0
3000
2000
1500
1000
500
400.0
0.00
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.40
3350
3063
3030
2933
2849
1743
1701
1646
1593
1537
1474
1445
1384
1348
1336
1291
1249
1209
1190
1156
1113
1078
1030
968
929
875
847
804
783
728
698
638
609
565
488

FIG. 31

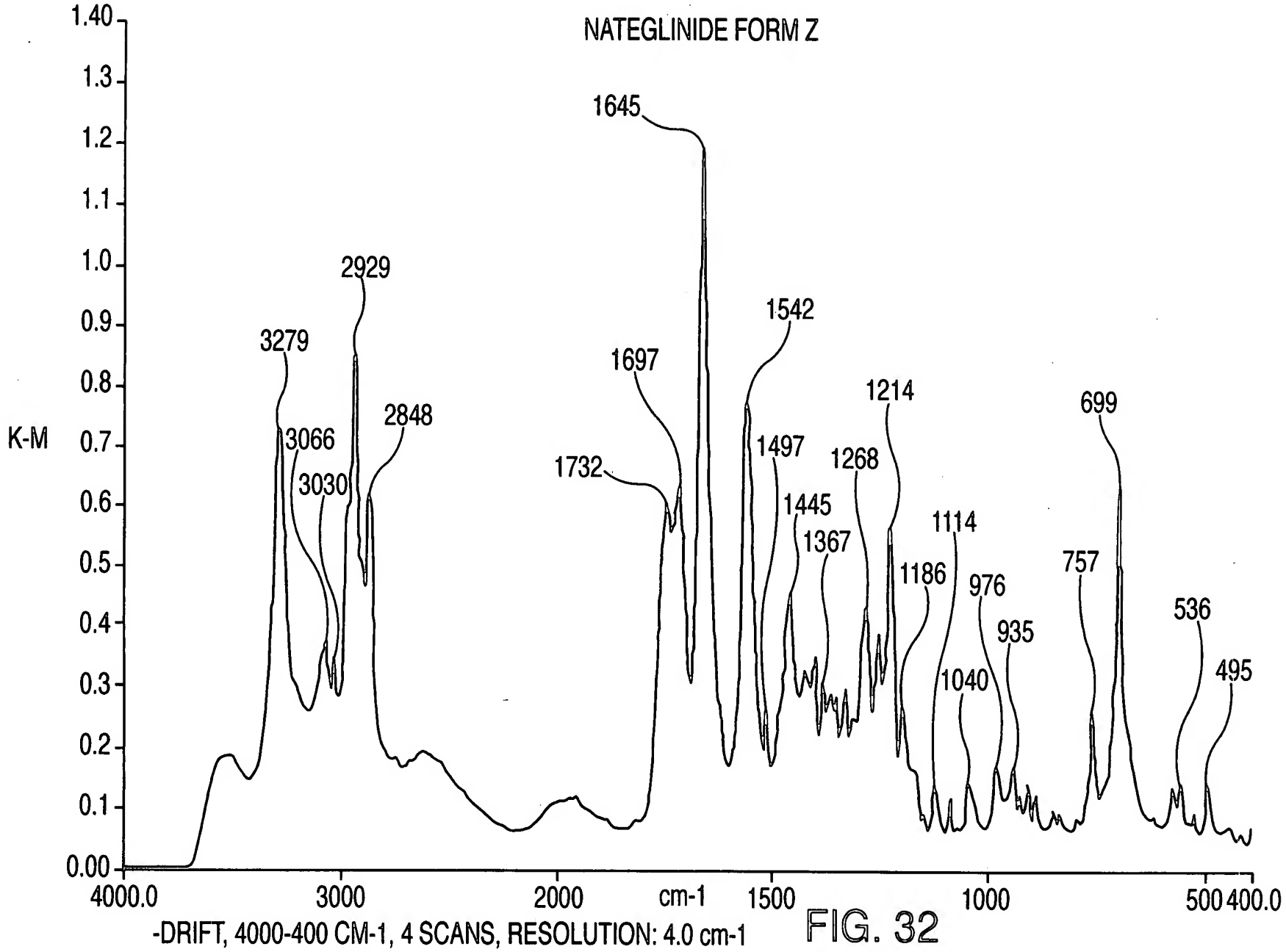

NATEGLINIDE FORM Z
1.40
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.00
K-M
1645
2929
1542
3279
1697
1214
699
2848
3066
1732
1497
1268
3030
1445
1114
1367
757
1186
976
536
935
1040
495
4000.0
3000
2000
cm-1
1500
1000
500
400.0
-DRIFT, 4000-400 CM-1, 4 SCANS, RESOLUTION: 4.0 cm-1

FIG. 32

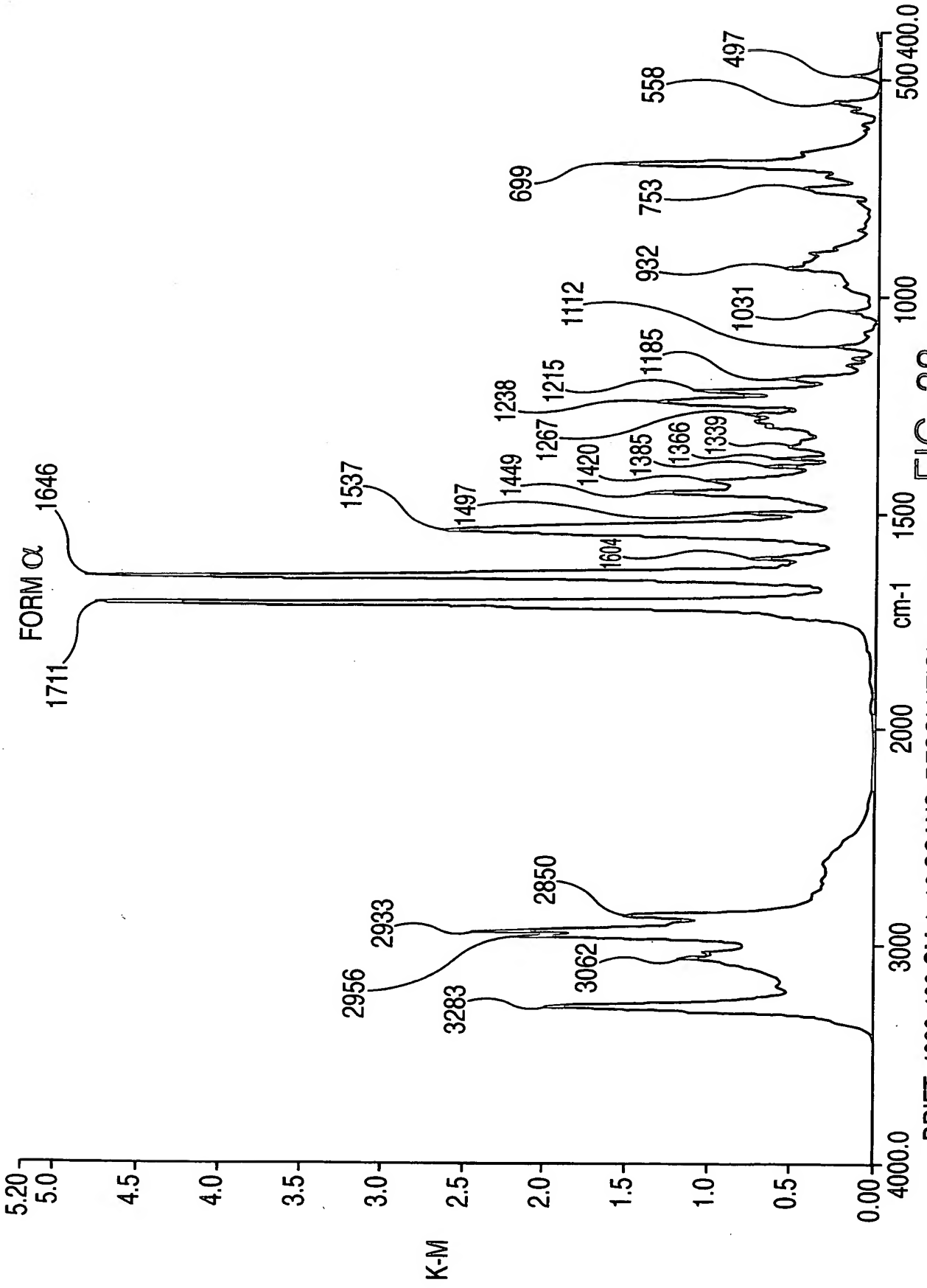

FORM α
1646
1711
1537
1497
1449
1604
1420
1385
1366
1339
1267
1238
1215
1185
1112
1031
932
753
699
558
497
2956
2933
2850
3283
3062
5.20
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.00
K-M
4000.0
3000
2000
1500
1000
500
400.0
cm-1
-DRIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.00 cm-1

FIG. 33

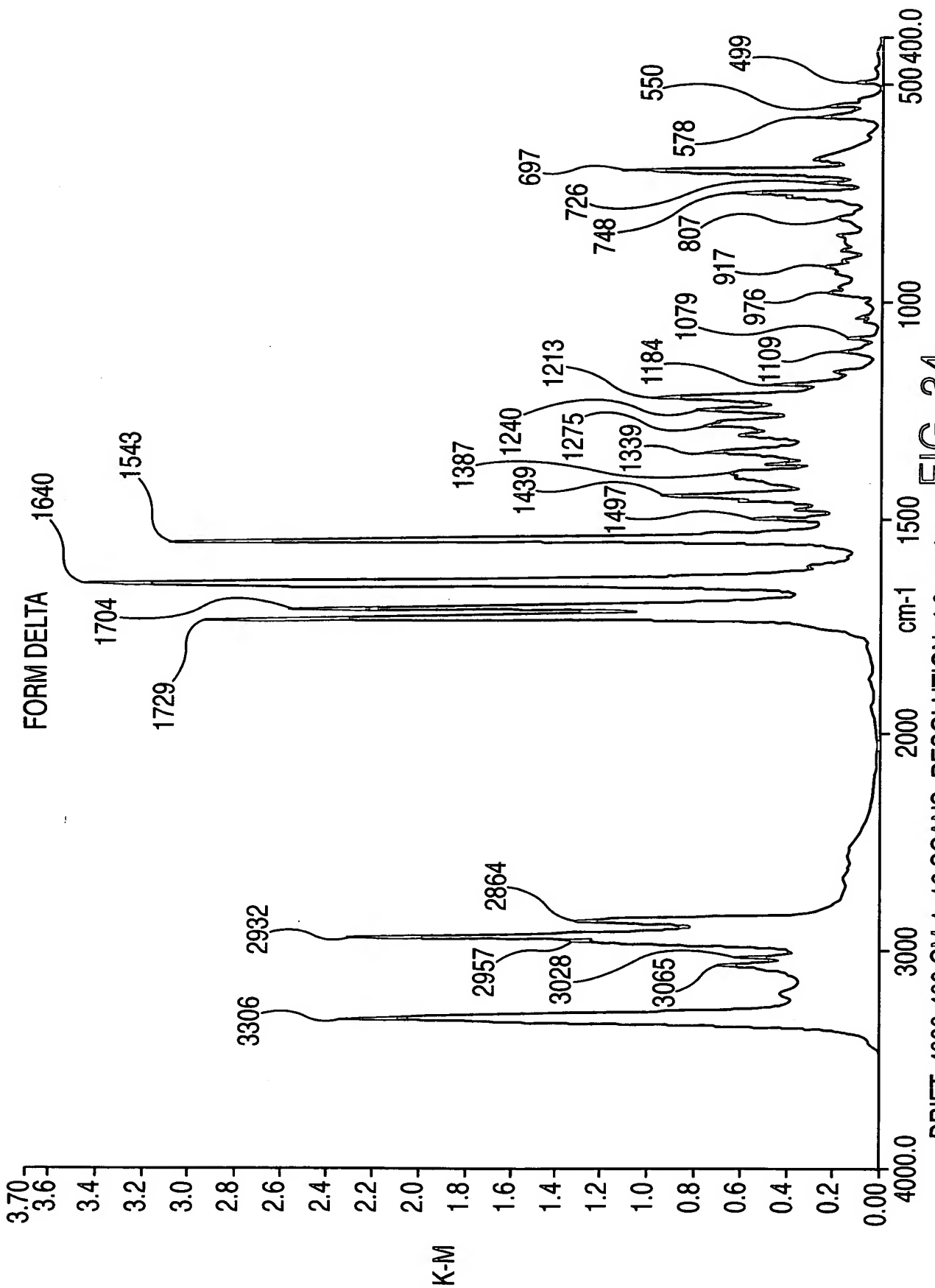

FORM DELTA
1640
1704
1729
1543
1387
1439
1497
1240
1275
1339
1213
1184
1079
1109
976
917
807
748
726
697
578
550
499
3306
2932
2957
3028
3065
2864
K-M
3.70
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.00
4000.0
3000
2000
1500
1000
500
400.0
cm-1
-DRIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.0 cm-1

FIG. 34

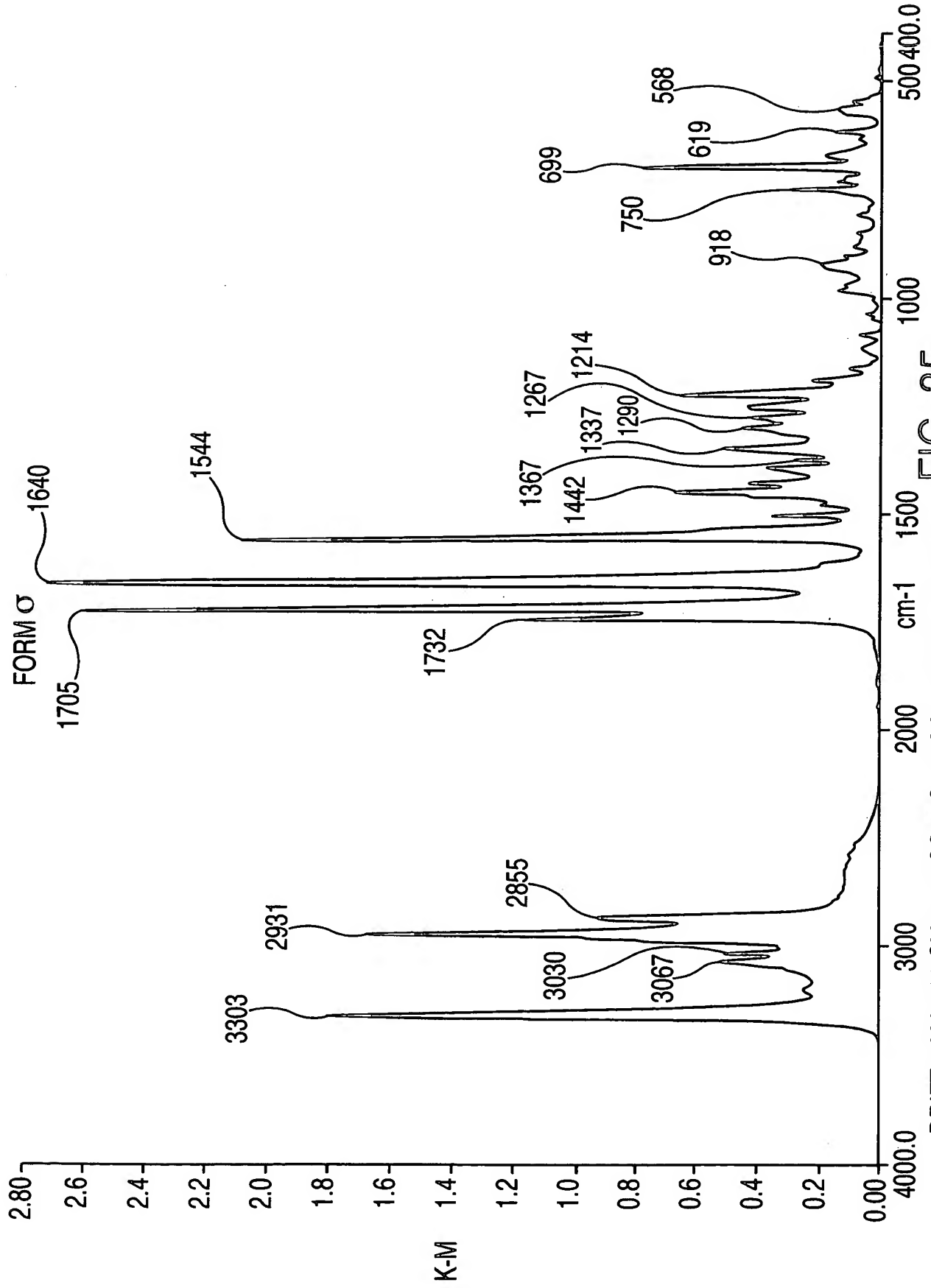
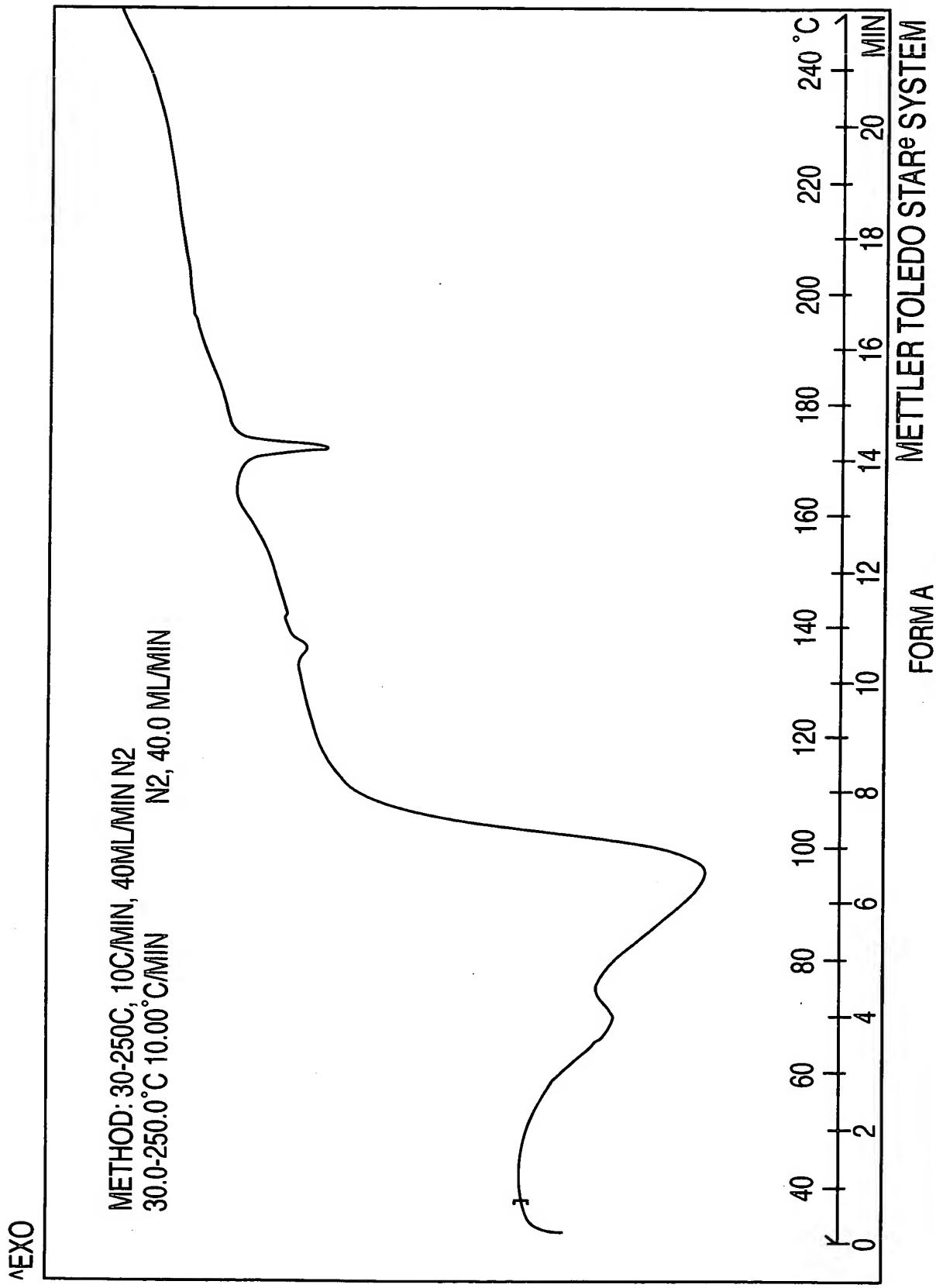
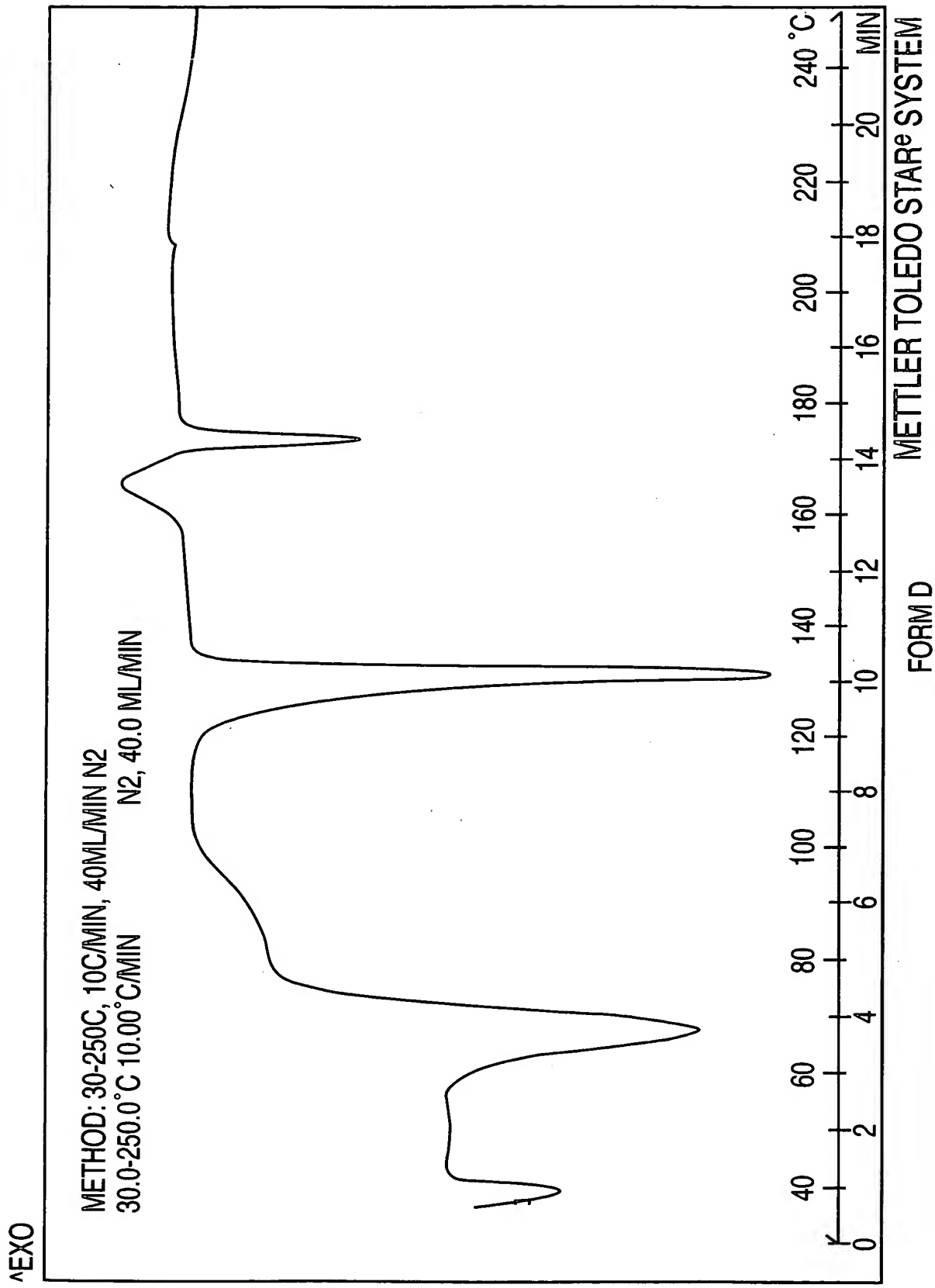

FORM σ
1640
1705
1544
1732
3303
2931
2855
3030
3067
1367
1442
1337
1290
1267
1214
699
750
918
619
568
K-M
2.80
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.00
4000.0
3000
2000
cm-1
1500
1000
500
400.0
-DRIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.0 cm-1

FIG. 35


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN
N2, 40.0 ML/MIN
40
60
80
100
120
140
160
180
200
220
240 °C
0
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM

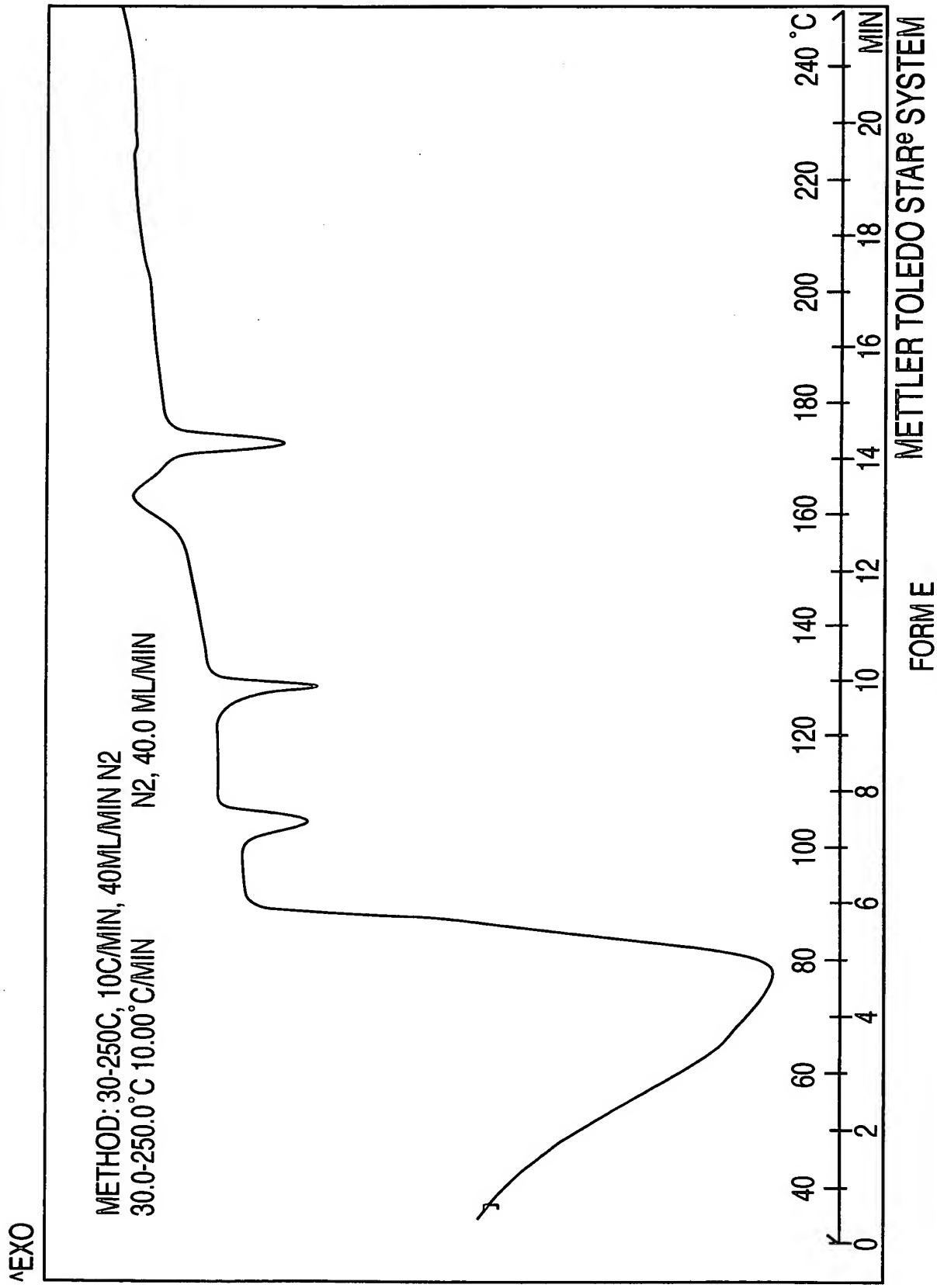
FORM A

FIG. 36


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0 40 2 60 4 80 6 100 8 120 10 140 12 160 14 180 16 200 18 220 20 240 °C
MIN
METTLER TOLEDO STARe SYSTEM

FORM D

FIG. 37


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0
40
60
80
100
120
140
160
180
200
220
240 °C
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM

FORM E

FIG. 38

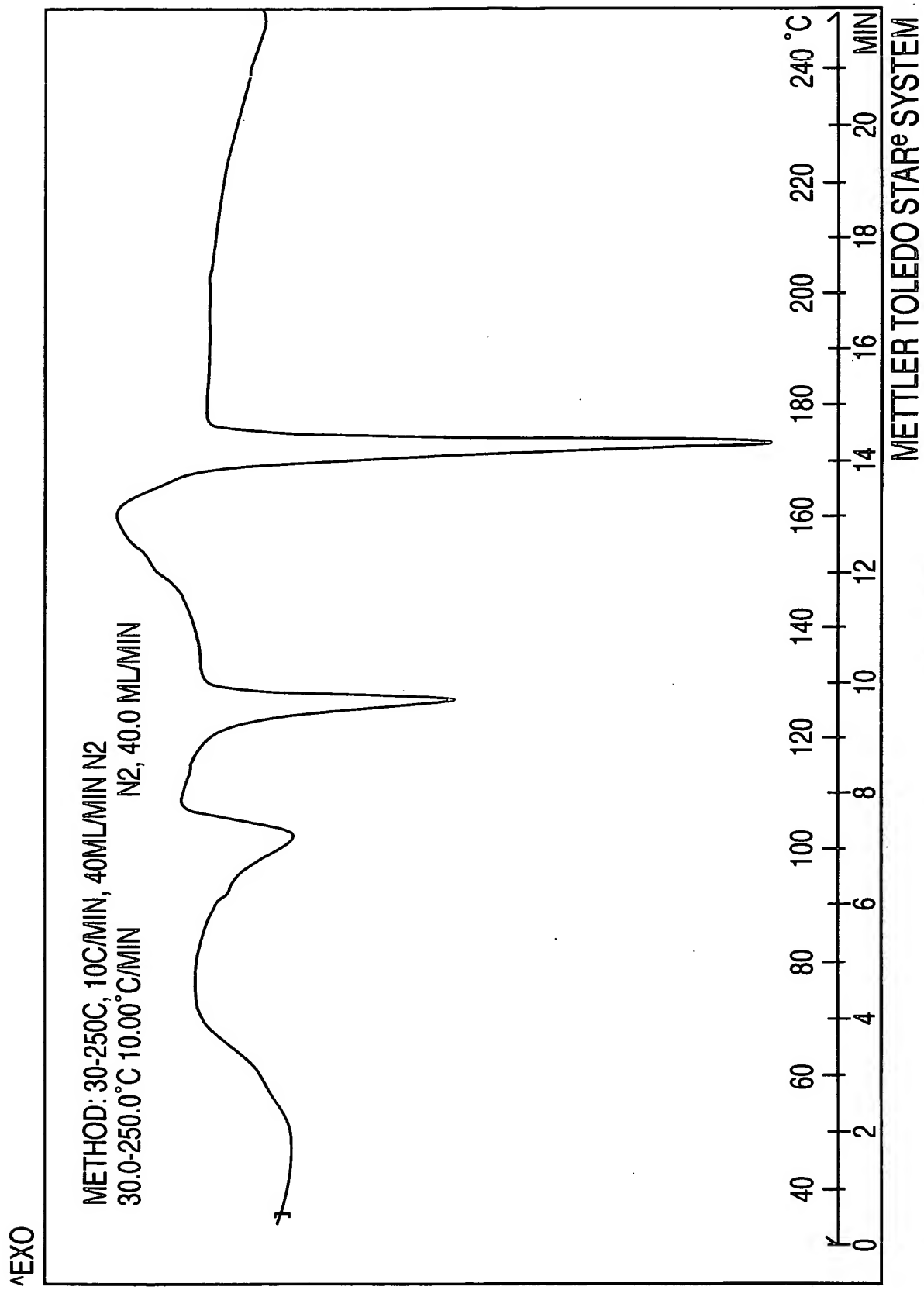

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
0
40
60
80
100
120
140
160
180
200
220
240 °C
2
4
6
8
10
12
14
16
18
20
MIN

FIG. 39

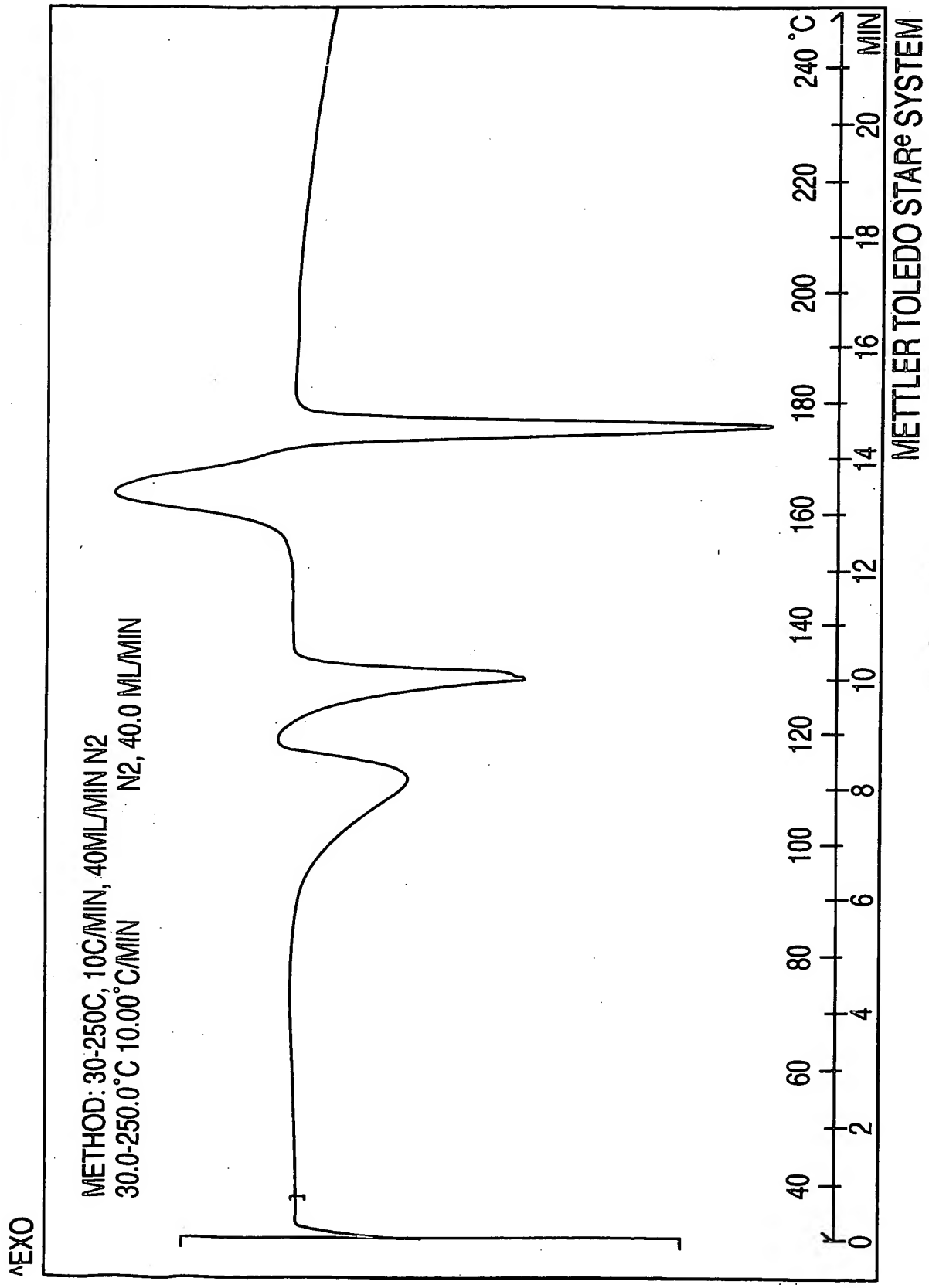

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN
N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
MIN
°C
0
2
4
6
8
10
12
14
16
18
20
40
60
80
100
120
140
160
180
200
220
240

FIG. 40

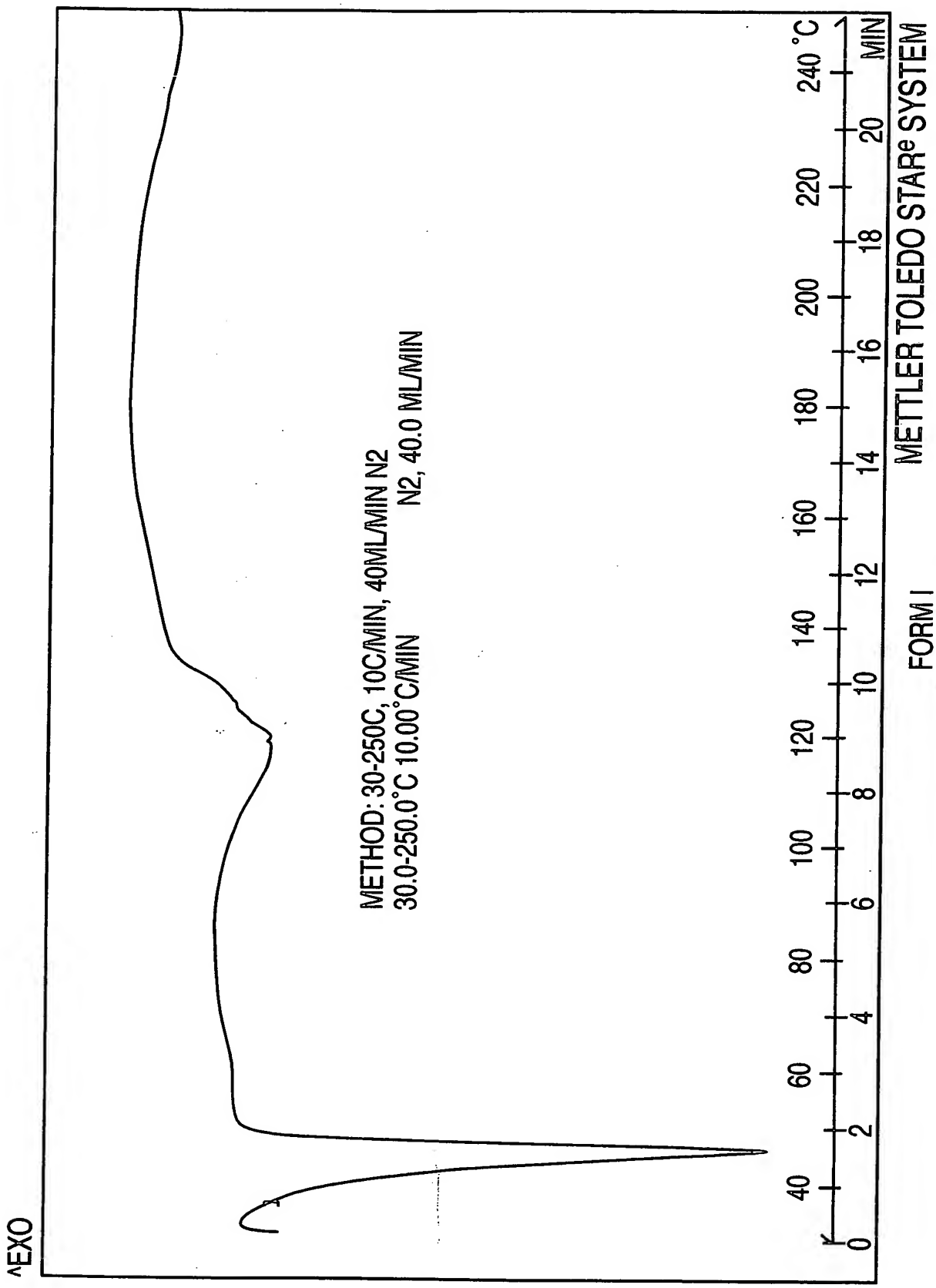

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
FORM I
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C

FIG. 41

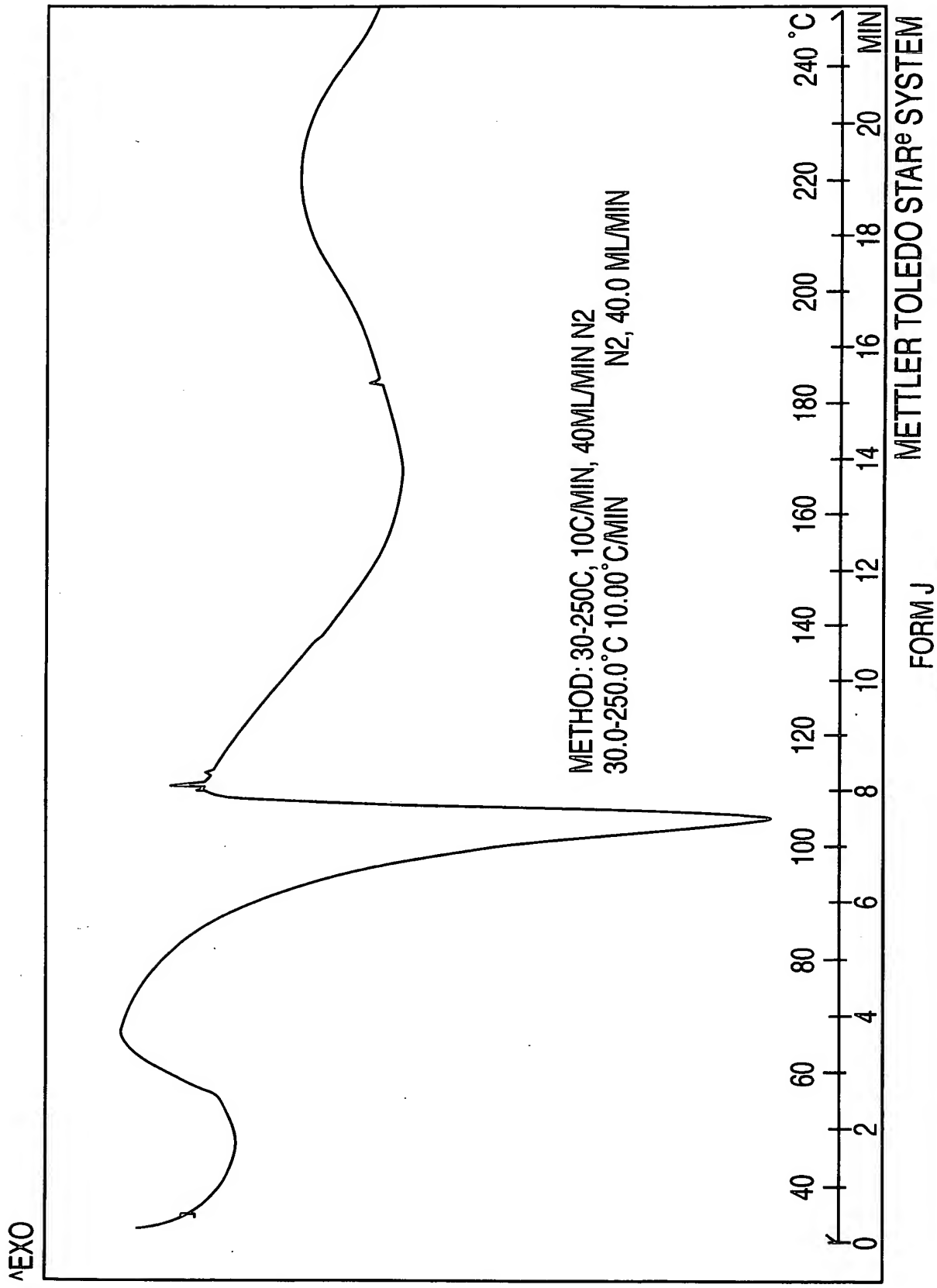
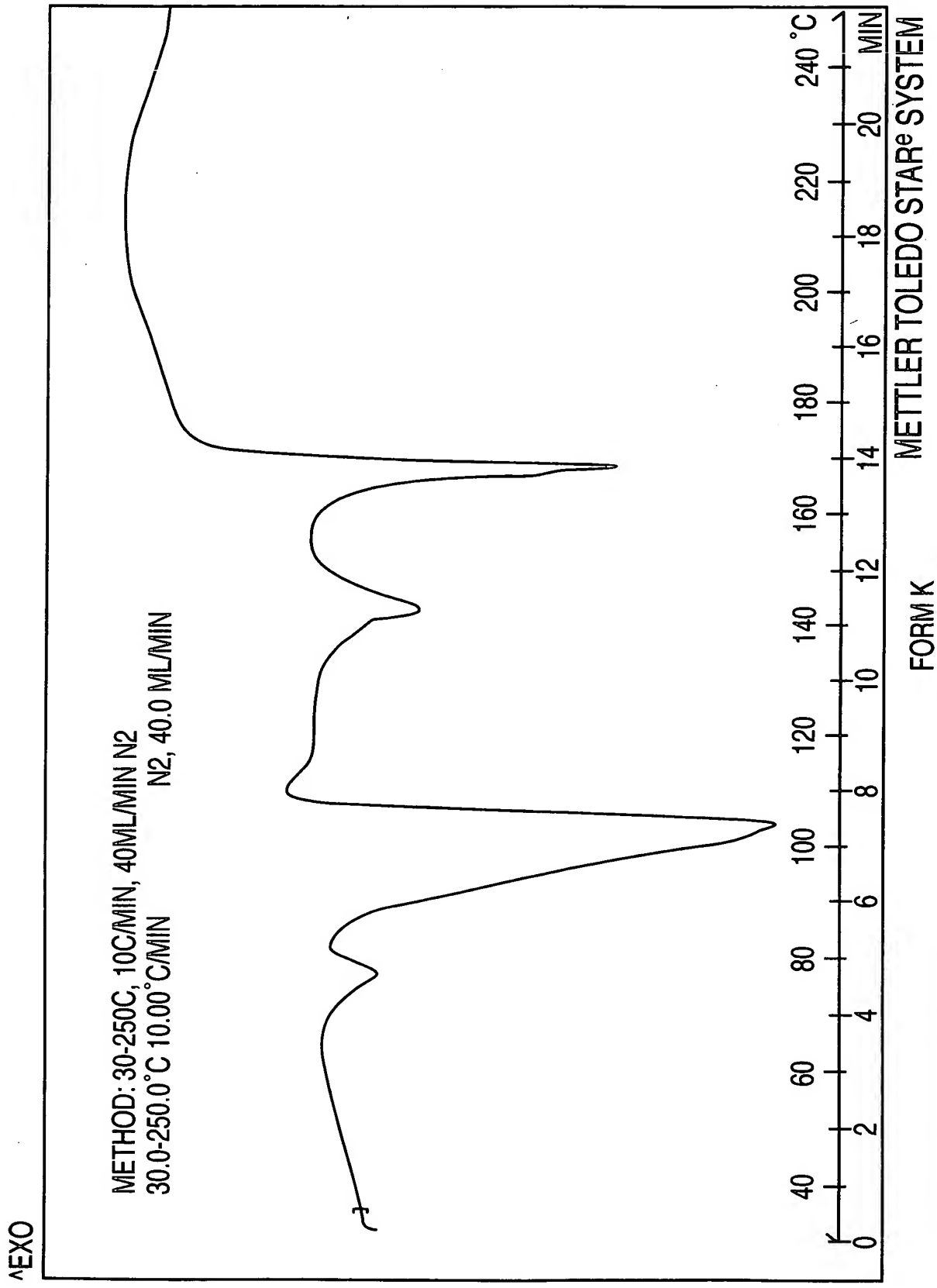
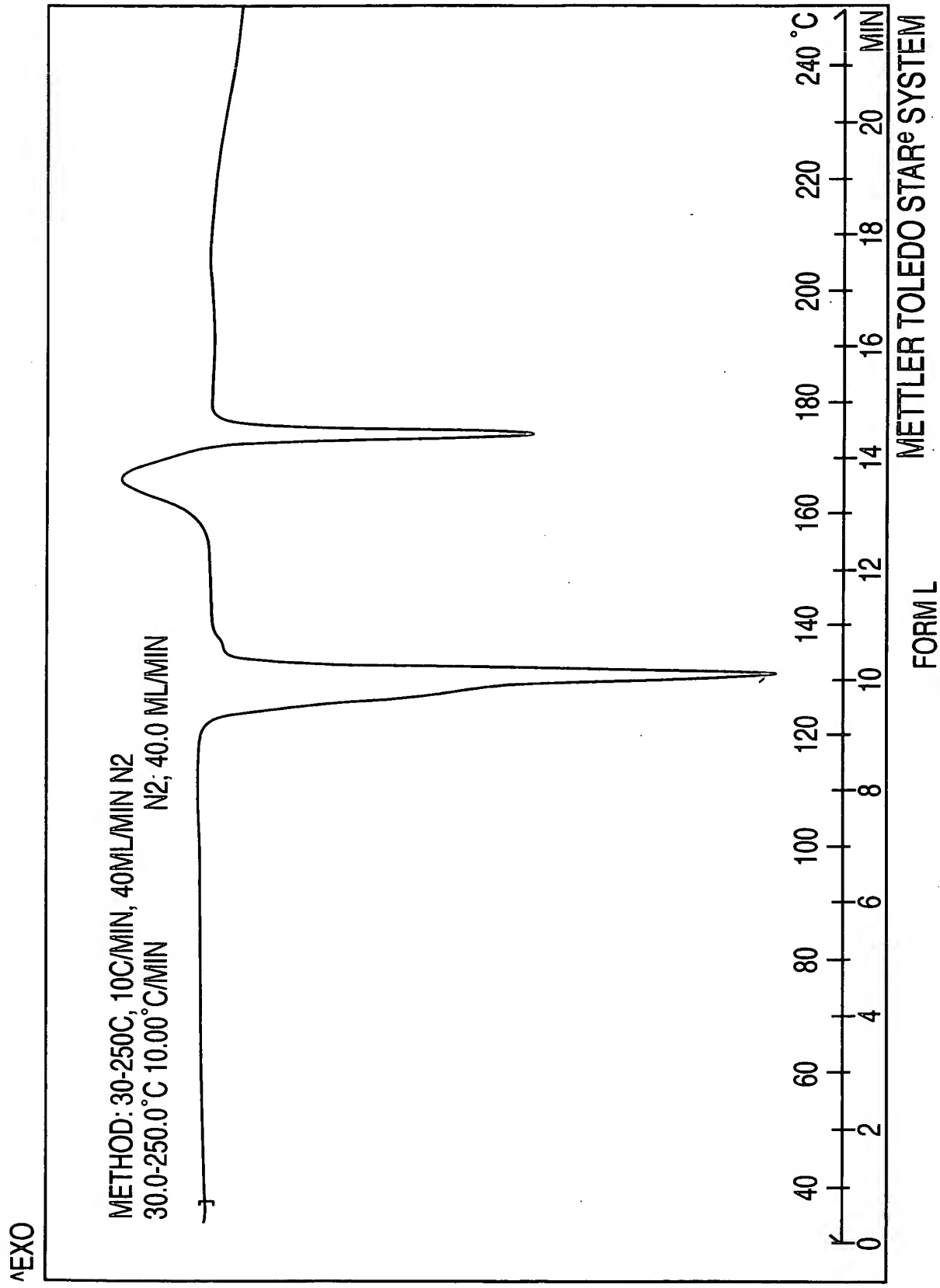

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
FORM J
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C

FIG. 42


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0 40 2 60 4 80 6 100 8 120 10 140 12 160 14 180 16 200 18 220 20 240 °C MIN
METTLER TOLEDO STARe SYSTEM

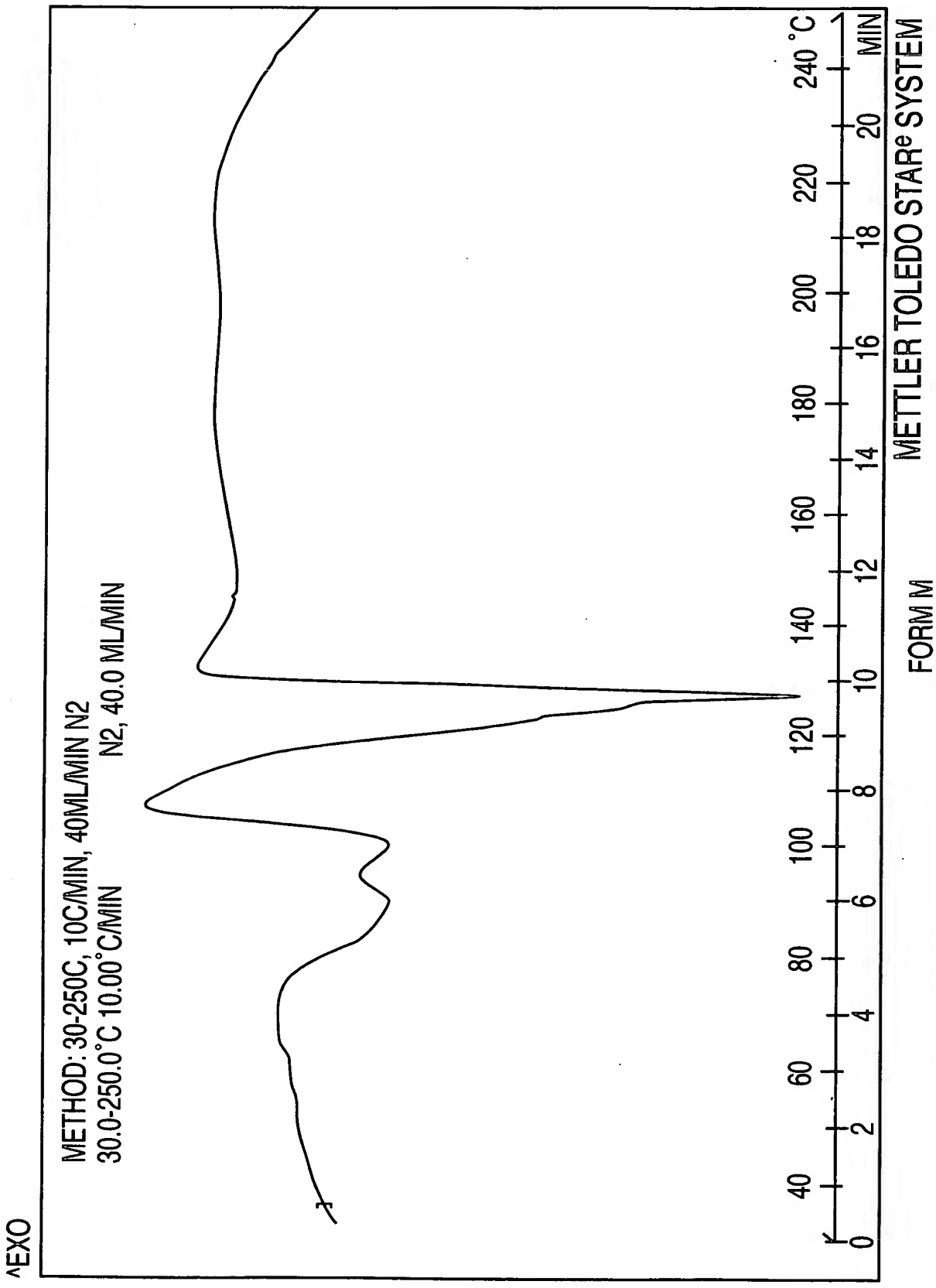
FORM K

FIG. 43


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2; 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
0 40
2 60
4 80
6 100
8 120
10 140
12 160
14 180
16 200
18 220
20 240 °C
MIN

FORM L

FIG. 44


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0
40
60
2
80
4
100
6
120
8
140
10
160
12
180
14
200
16
220
18
240 °C
MIN
20
METTLER TOLEDO STARe SYSTEM

FORM M

FIG. 45

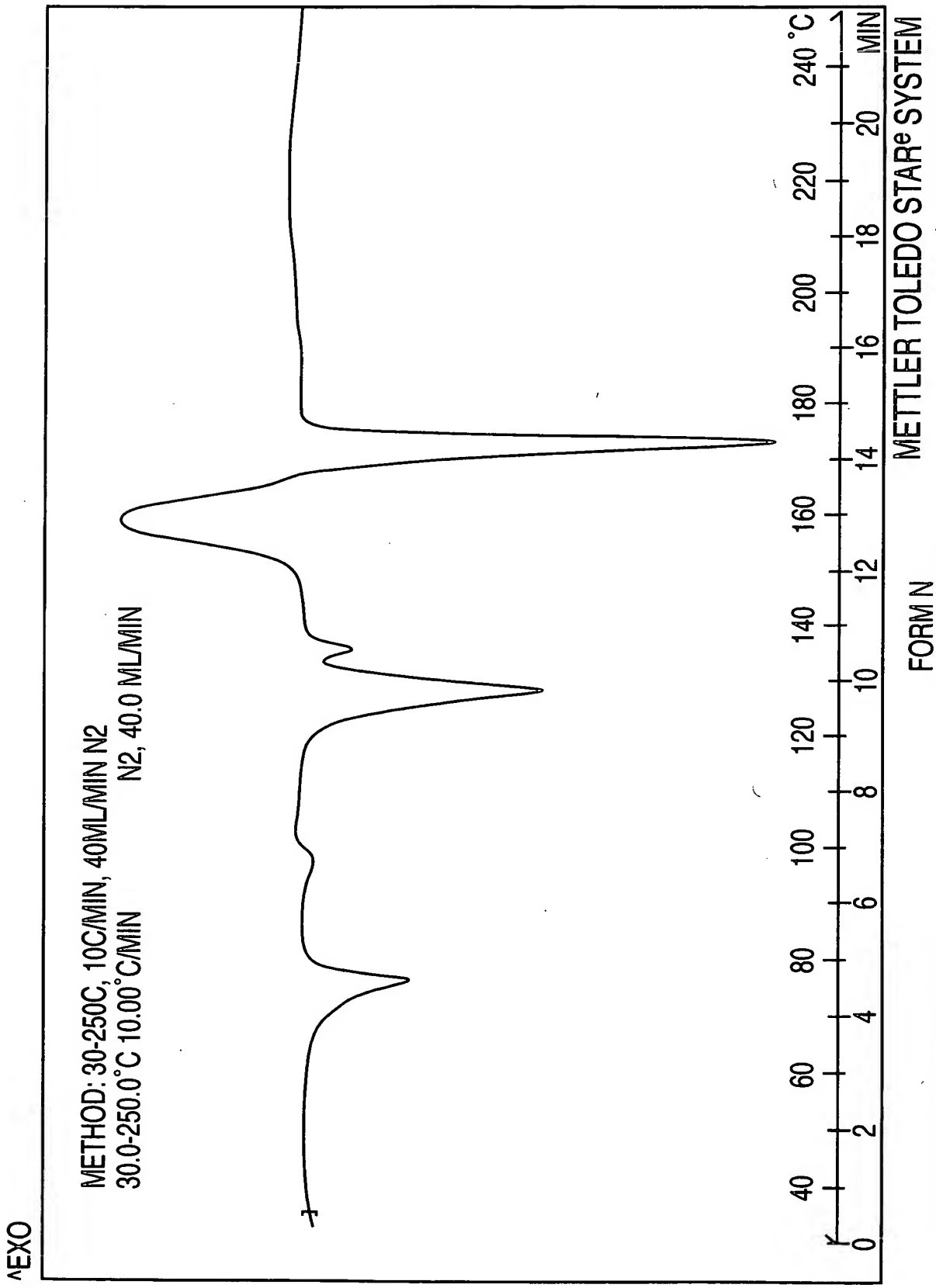
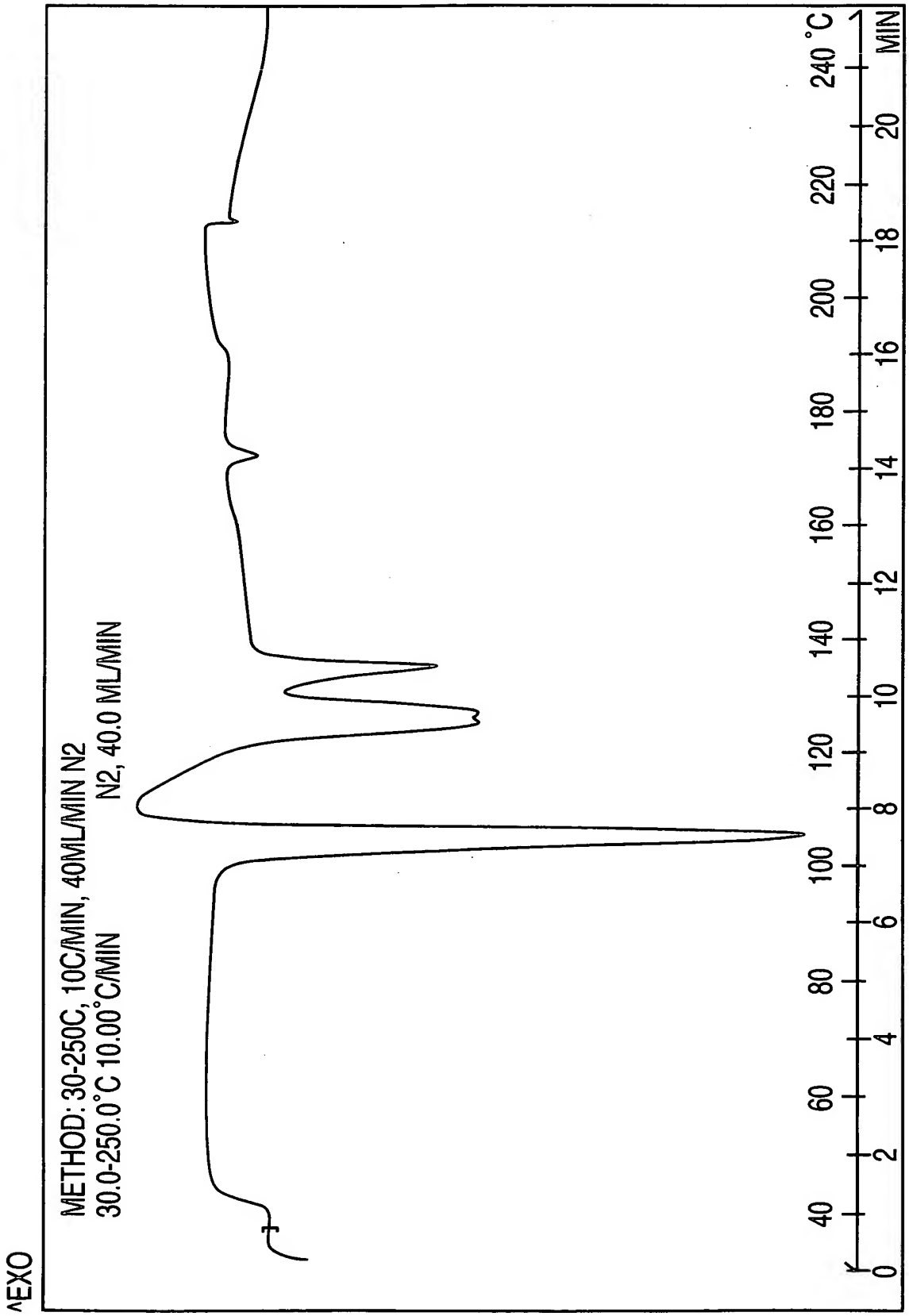
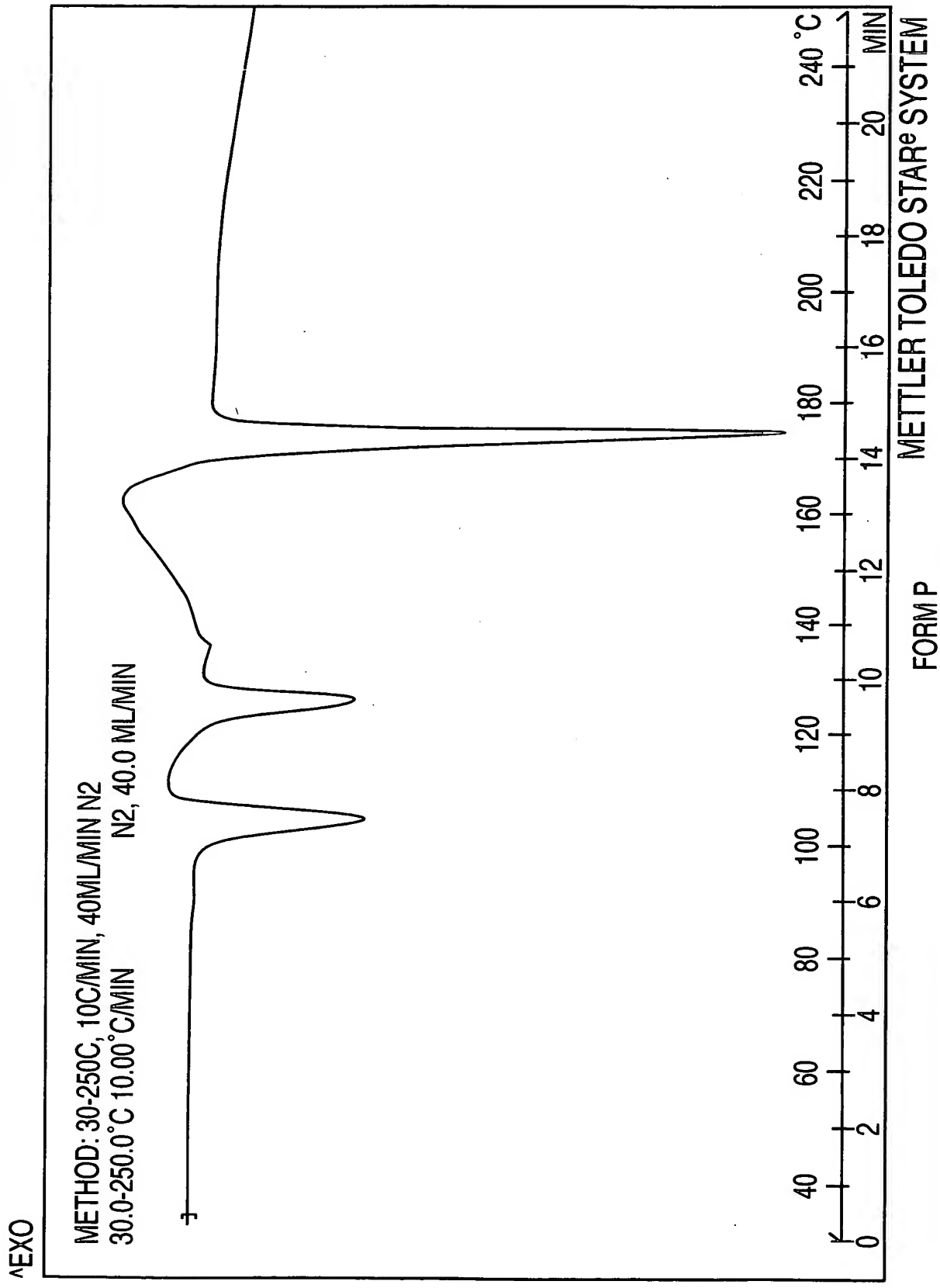

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
FORM N
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C

FIG. 46


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN
N2, 40.0 ML/MIN
0
40
2
60
4
80
6
100
8
120
10
140
12
160
14
180
16
200
18
220
20
240 °C
MIN
METTLER TOLEDO STARe SYSTEM

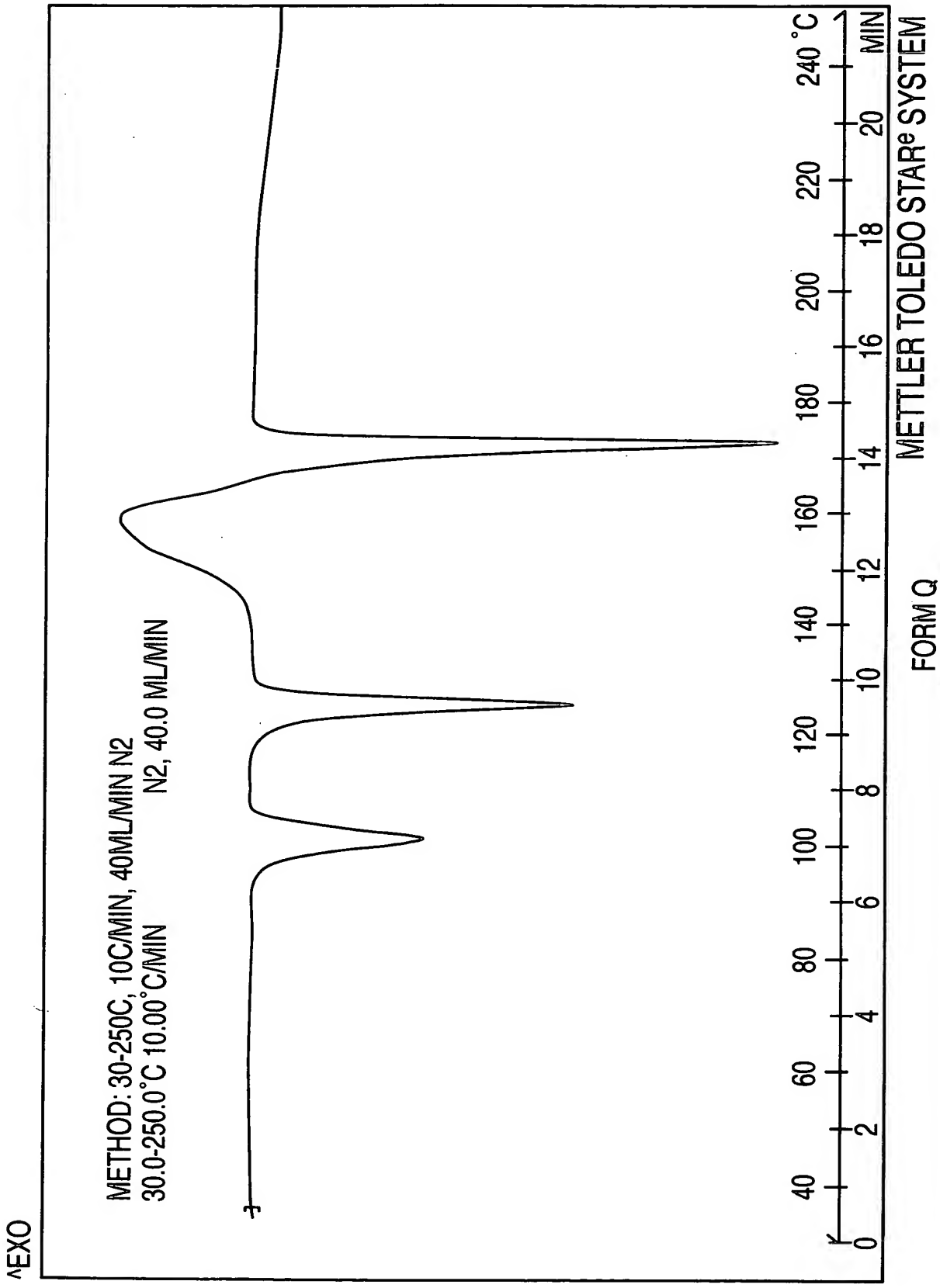
FORM O

FIG. 47


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0
40
60
80
100
120
140
160
180
200
220
240 °C
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM

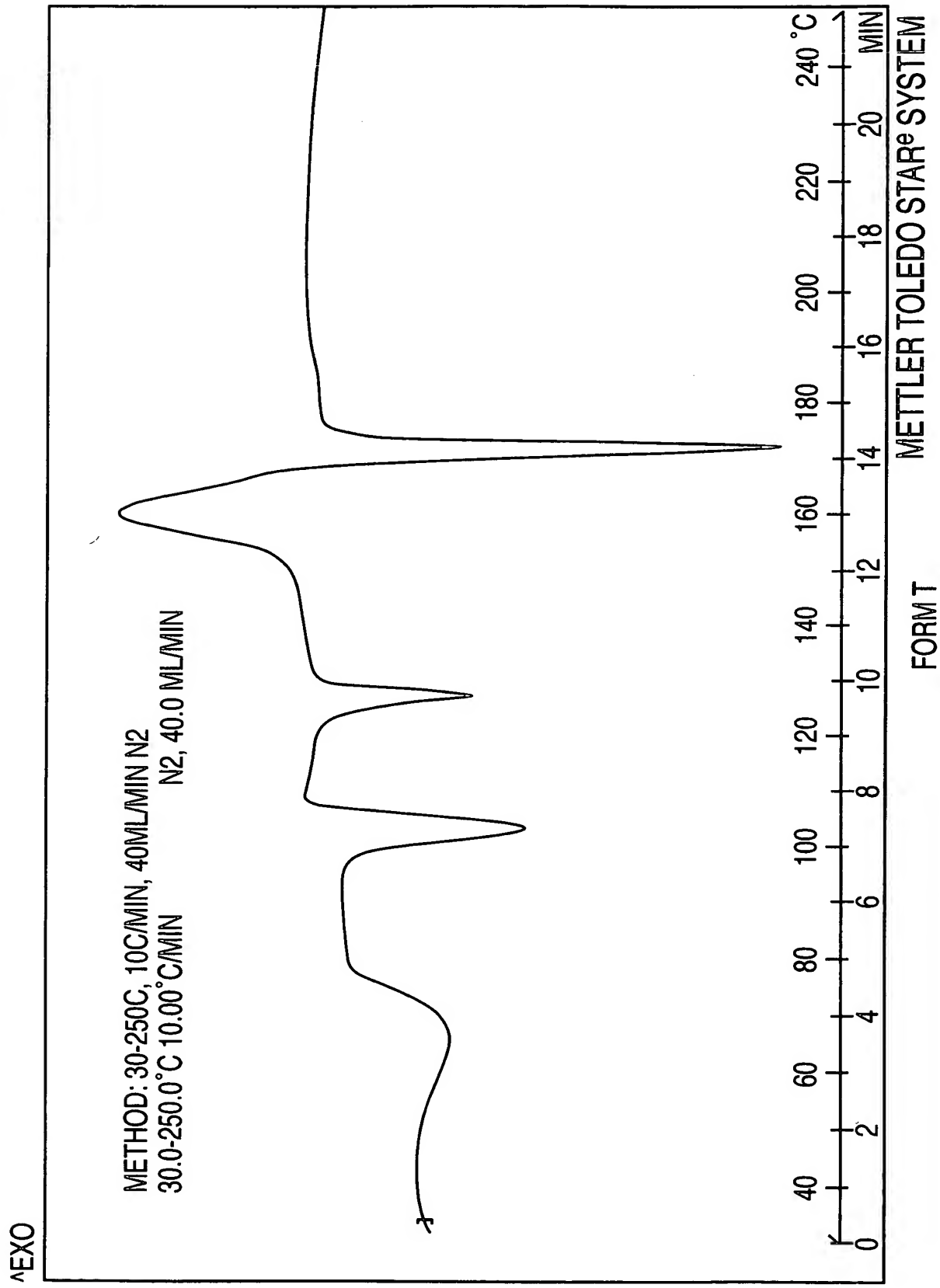
FORM P

FIG. 48


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
40
60
80
100
120
140
160
180
200
220
240 °C
0
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM

FORM Q

FIG. 49


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
40
60
80
100
120
140
160
180
200
220
240 °C
0
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM

FORM T

FIG. 50

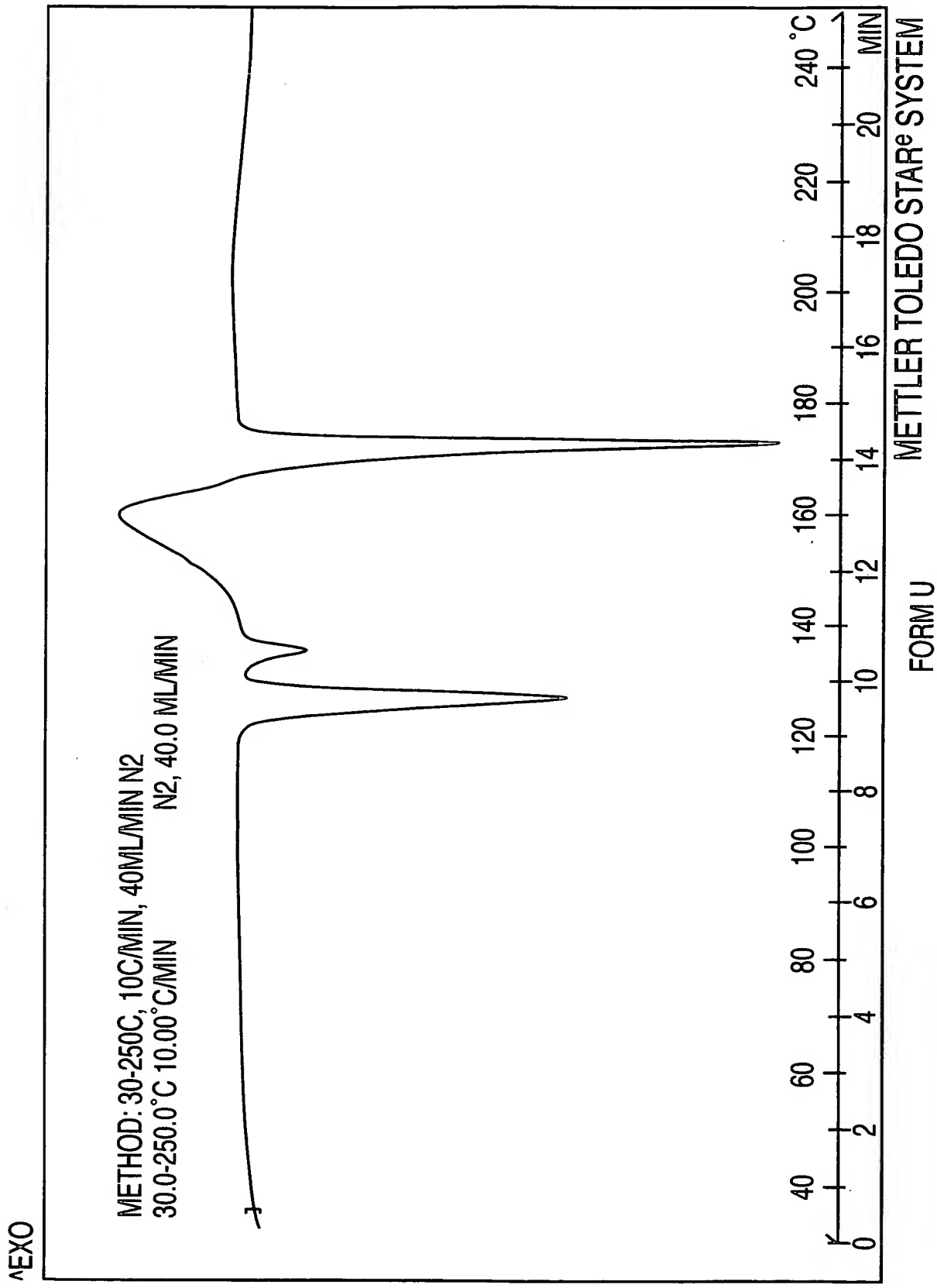

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
FORM U
0
2
4
6
8
10
12
14
16
18
20
MIN
40
60
80
100
120
140
160
180
200
220
240 °C

FIG. 51

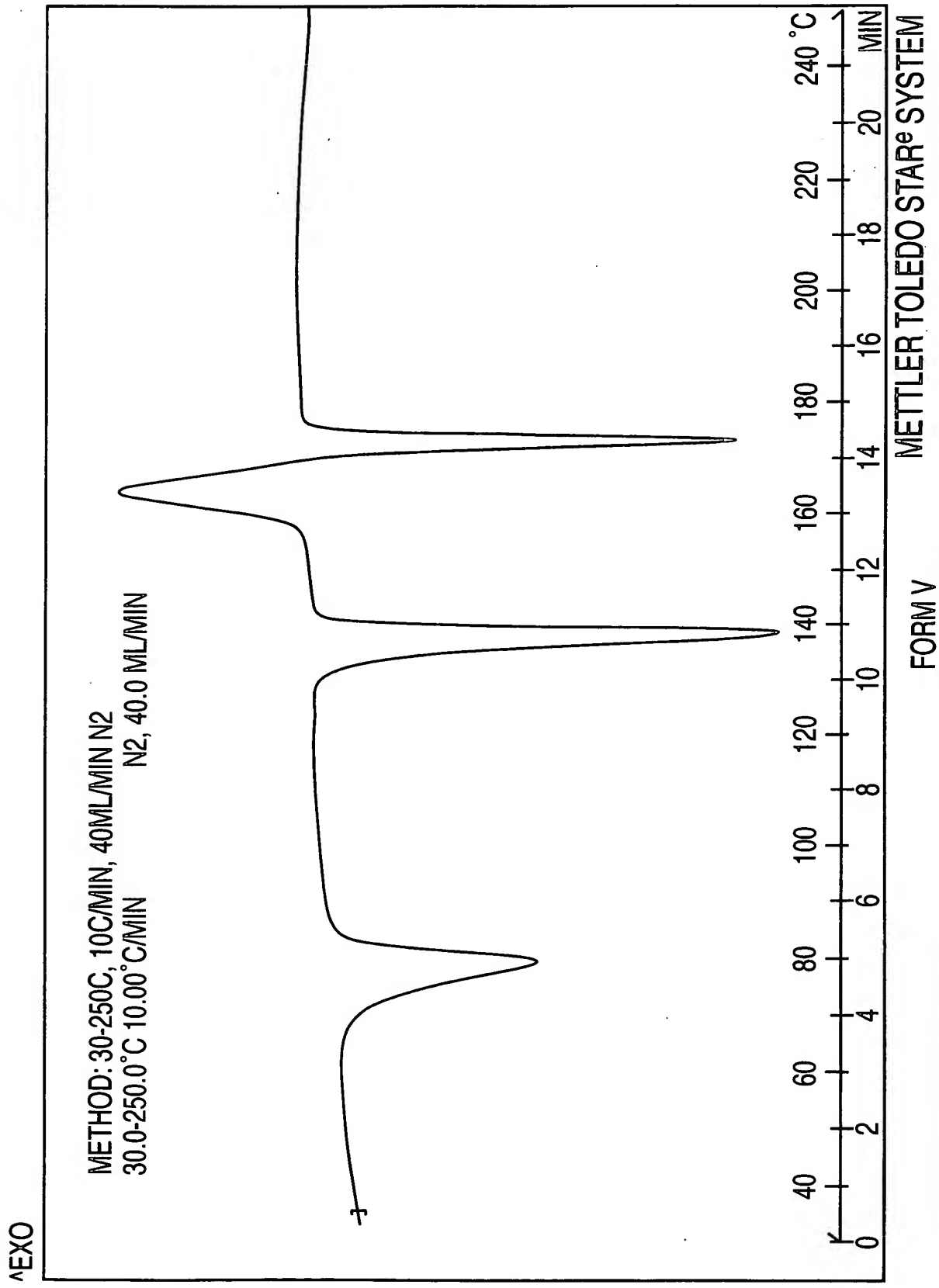

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
METTLER TOLEDO STARe SYSTEM
FORM V
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C

FIG. 52

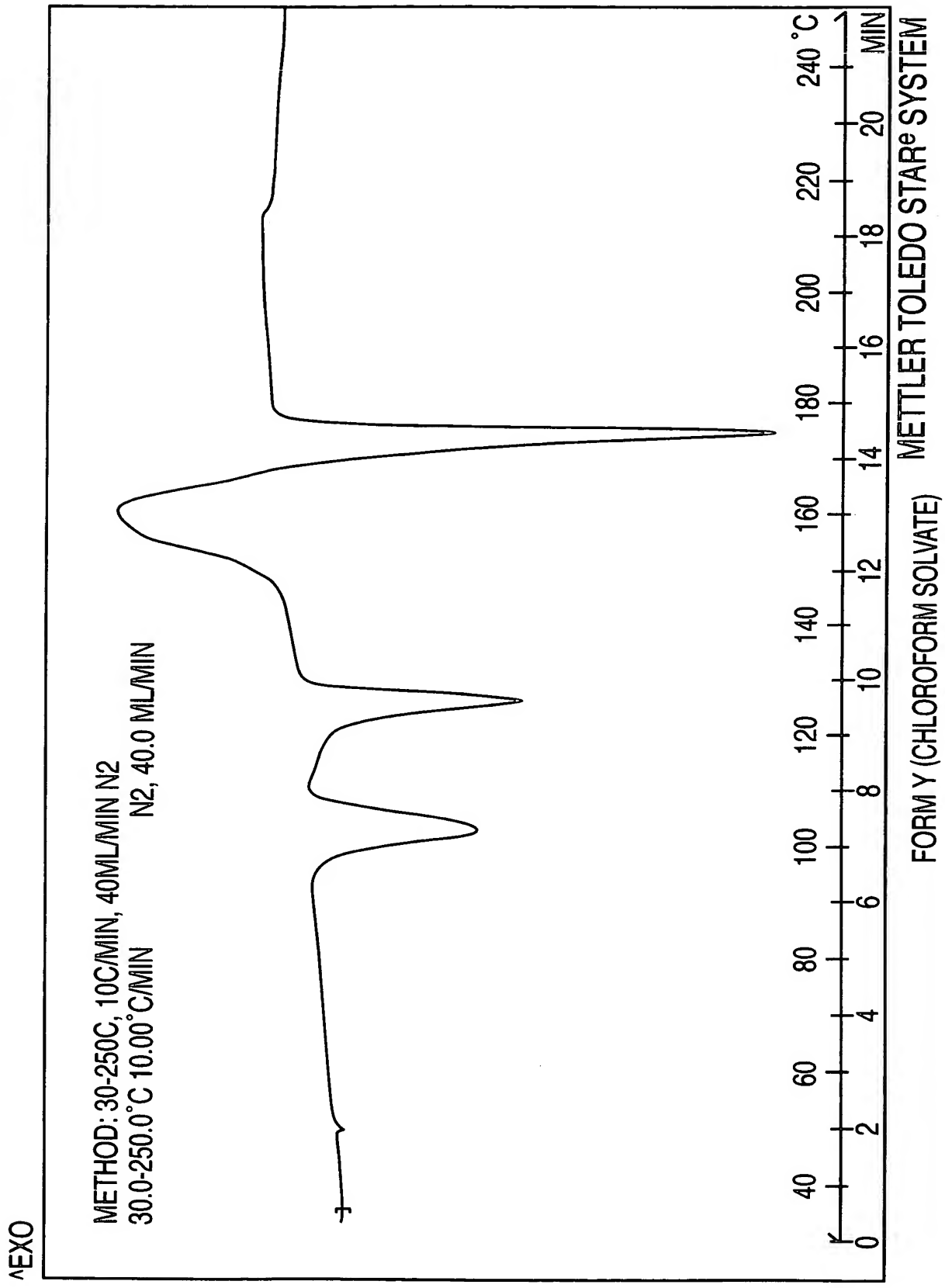

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C
FORM Y (CHLOROFORM SOLVATE) METTLER TOLEDO STARe SYSTEM

FIG. 53

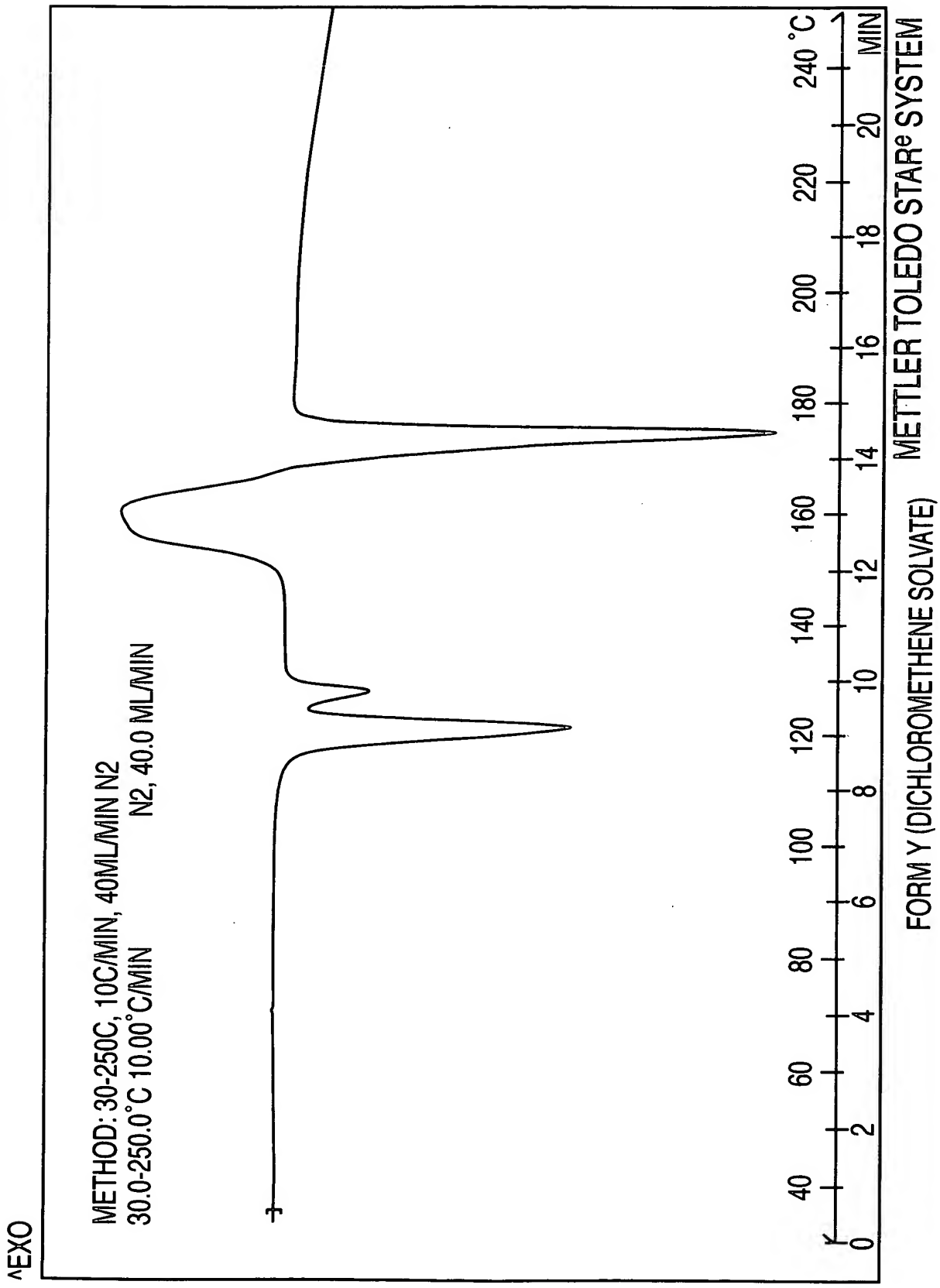

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C
FORM Y (DICHLOROMETHENE SOLVATE)
METTLER TOLEDO STARe SYSTEM

FIG. 54

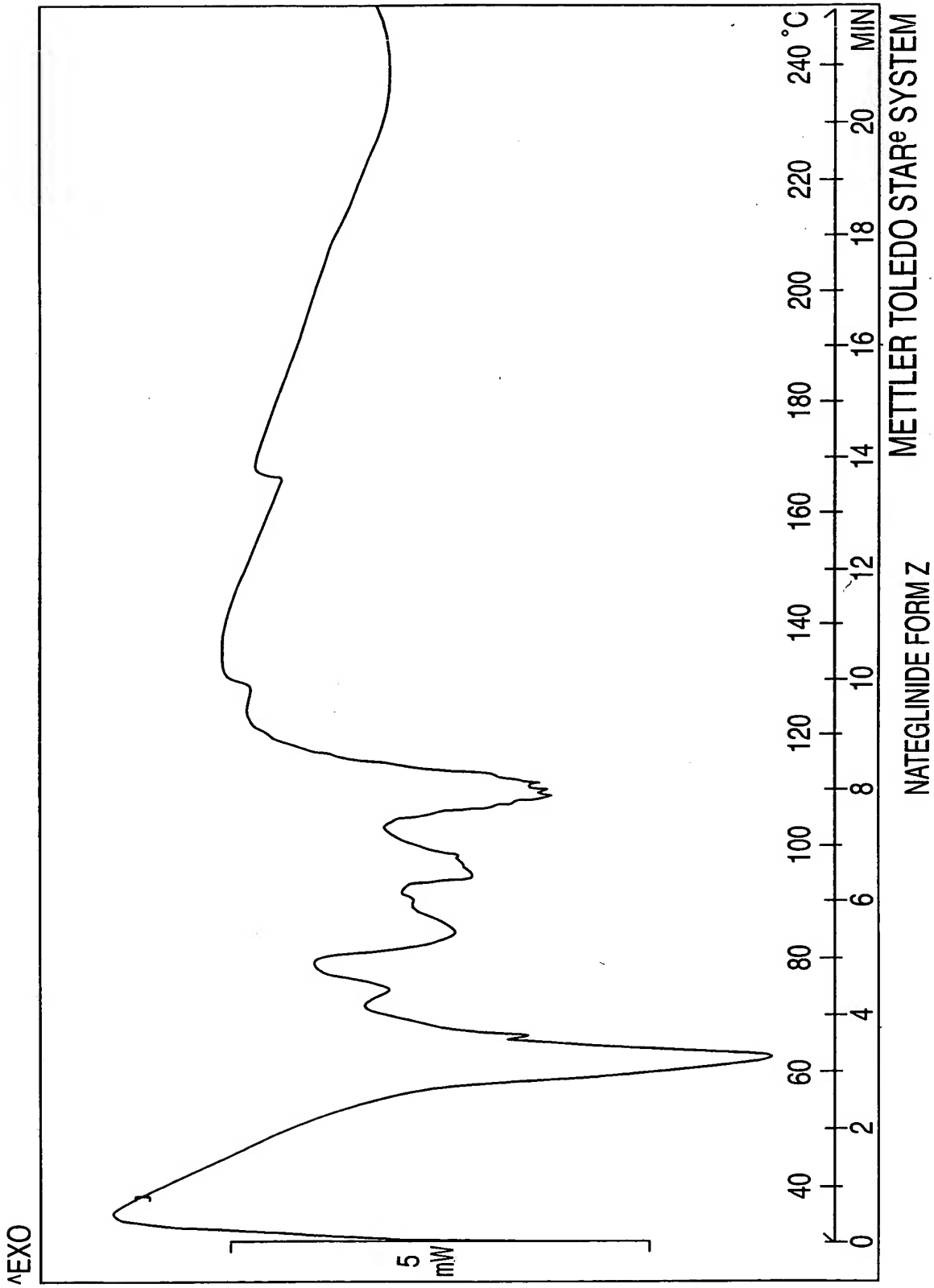
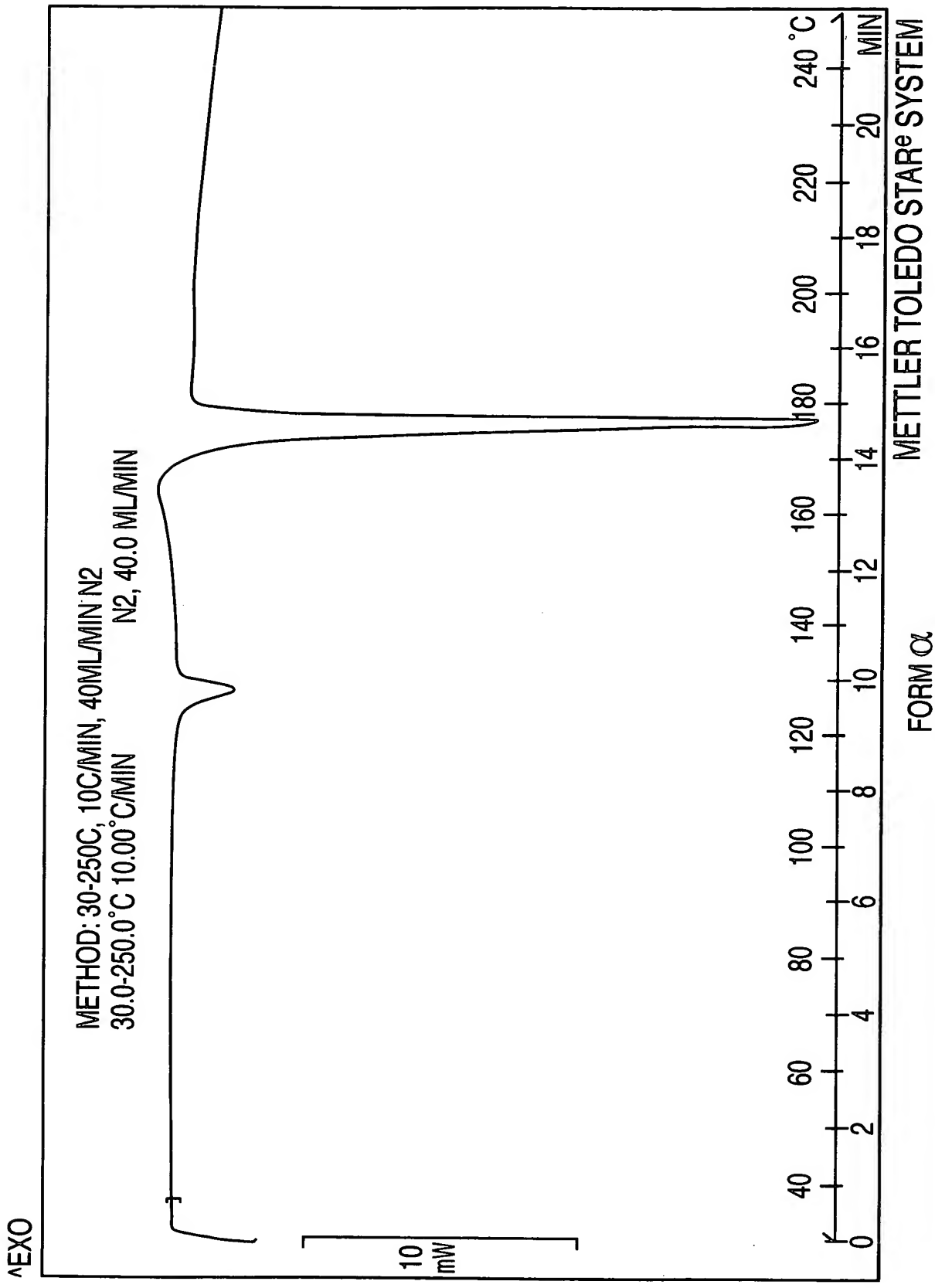
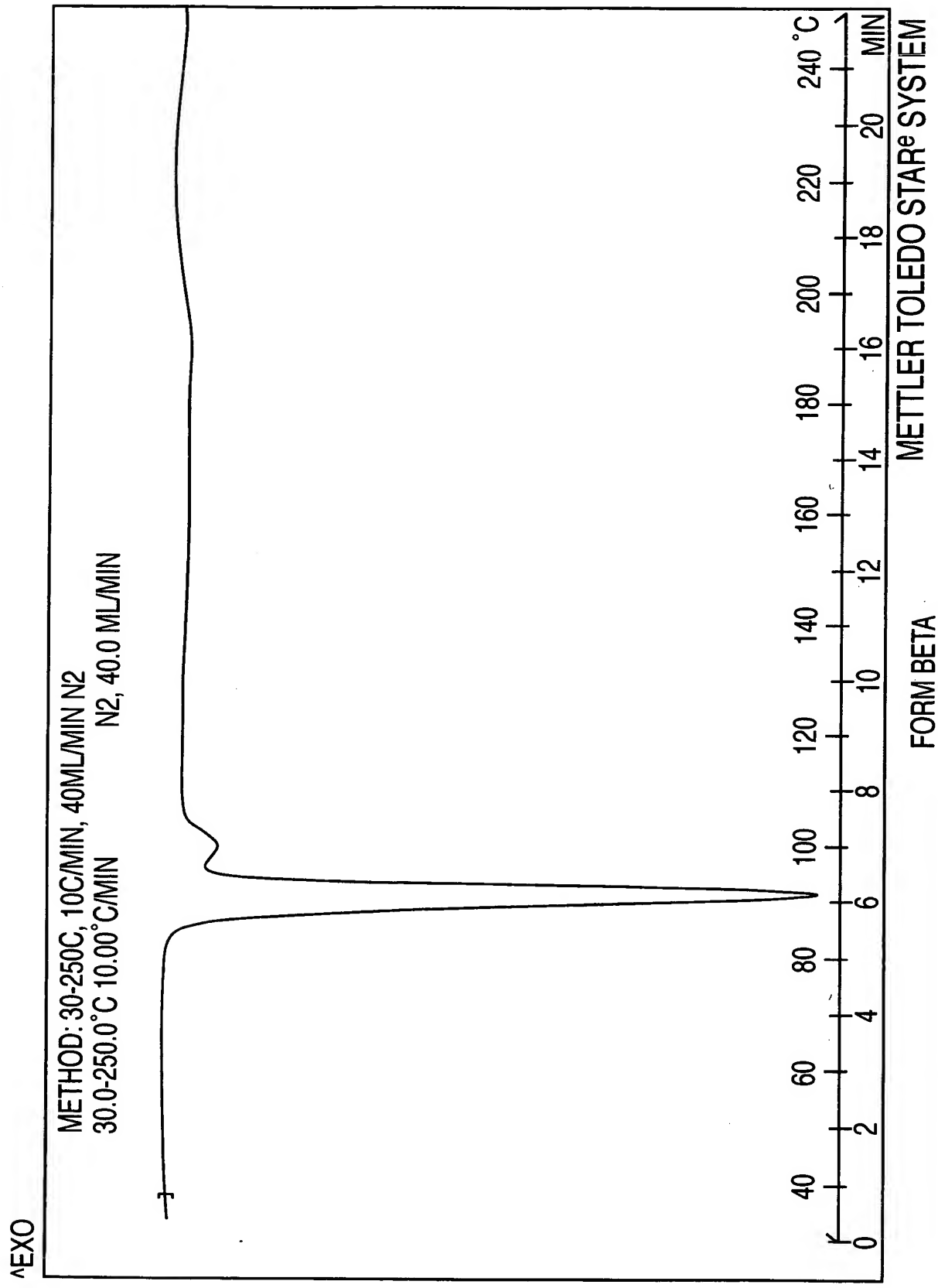

^EXO
5 mW
0
40
2
60
4
80
6
100
8
120
10
140
12
160
14
180
16
200
18
220
20
240 °C
MIN
METTLER TOLEDO STARe SYSTEM
NATEGLINIDE FORM Z

FIG. 55


^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
10 mW
0 40 2 60 4 80 6 100 8 120 10 140 12 160 14 180 16 200 18 220 20 240 °C MIN
METTLER TOLEDO STARe SYSTEM

FORM α
FIG. 56



FORM BETA

FIG. 57

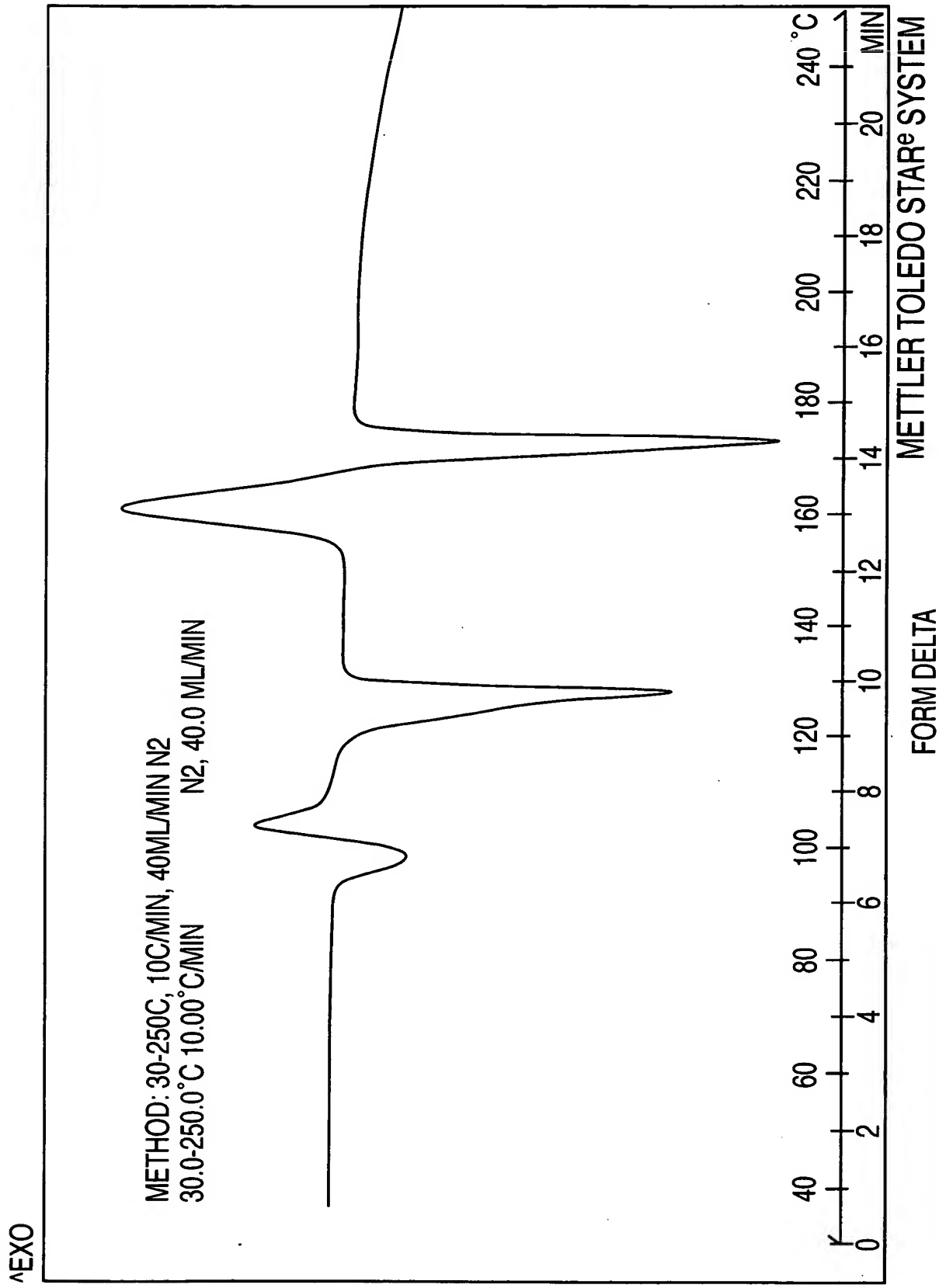

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0
40
60
80
100
120
140
160
180
200
220
240 °C
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM
FORM DELTA

FIG. 58

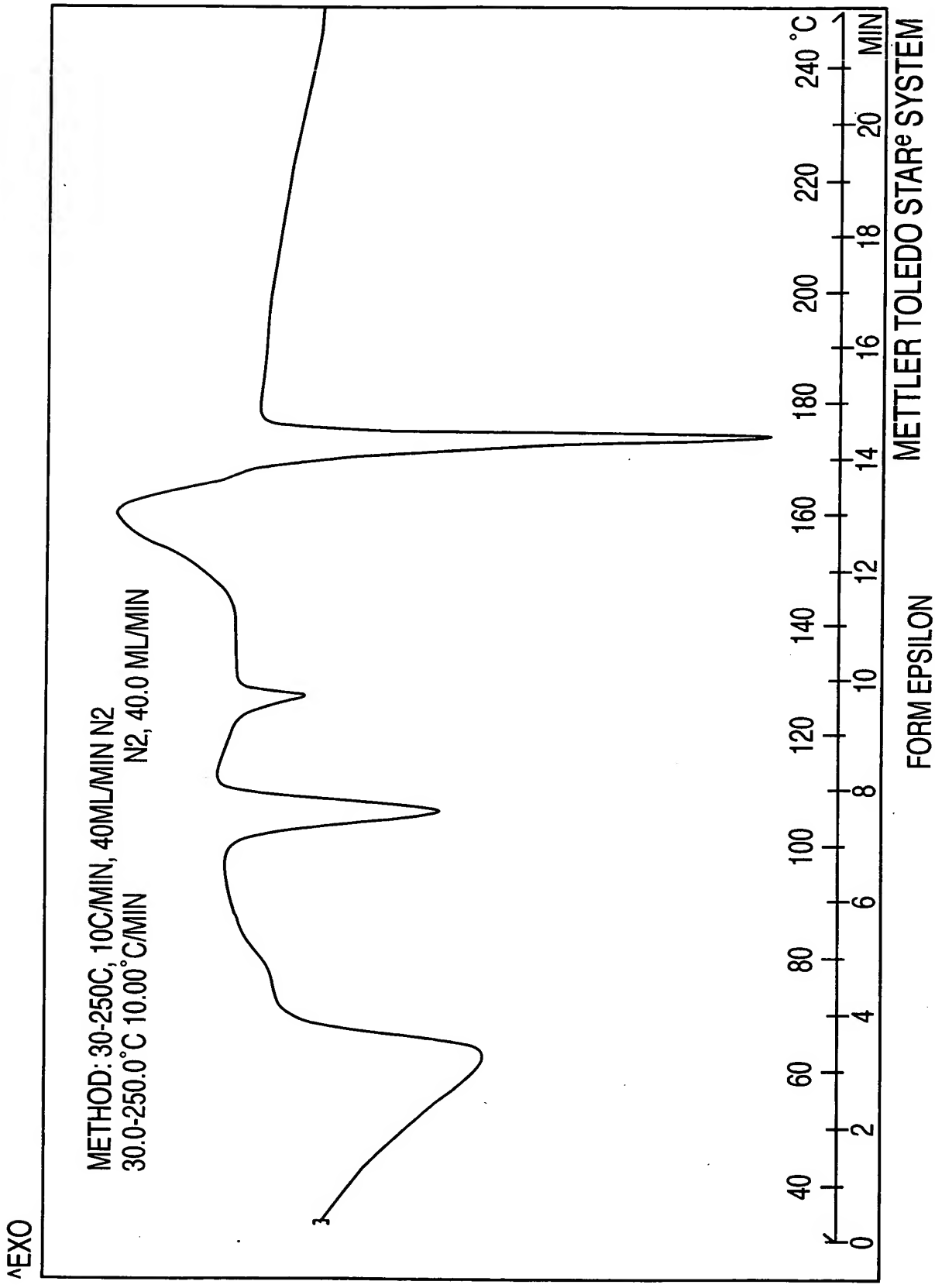

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0 40 2 60 4 80 6 100 8 120 10 140 12 160 14 180 16 200 18 220 20 240 °C MIN
METTLER TOLEDO STARe SYSTEM
FORM EPSILON

FIG. 59

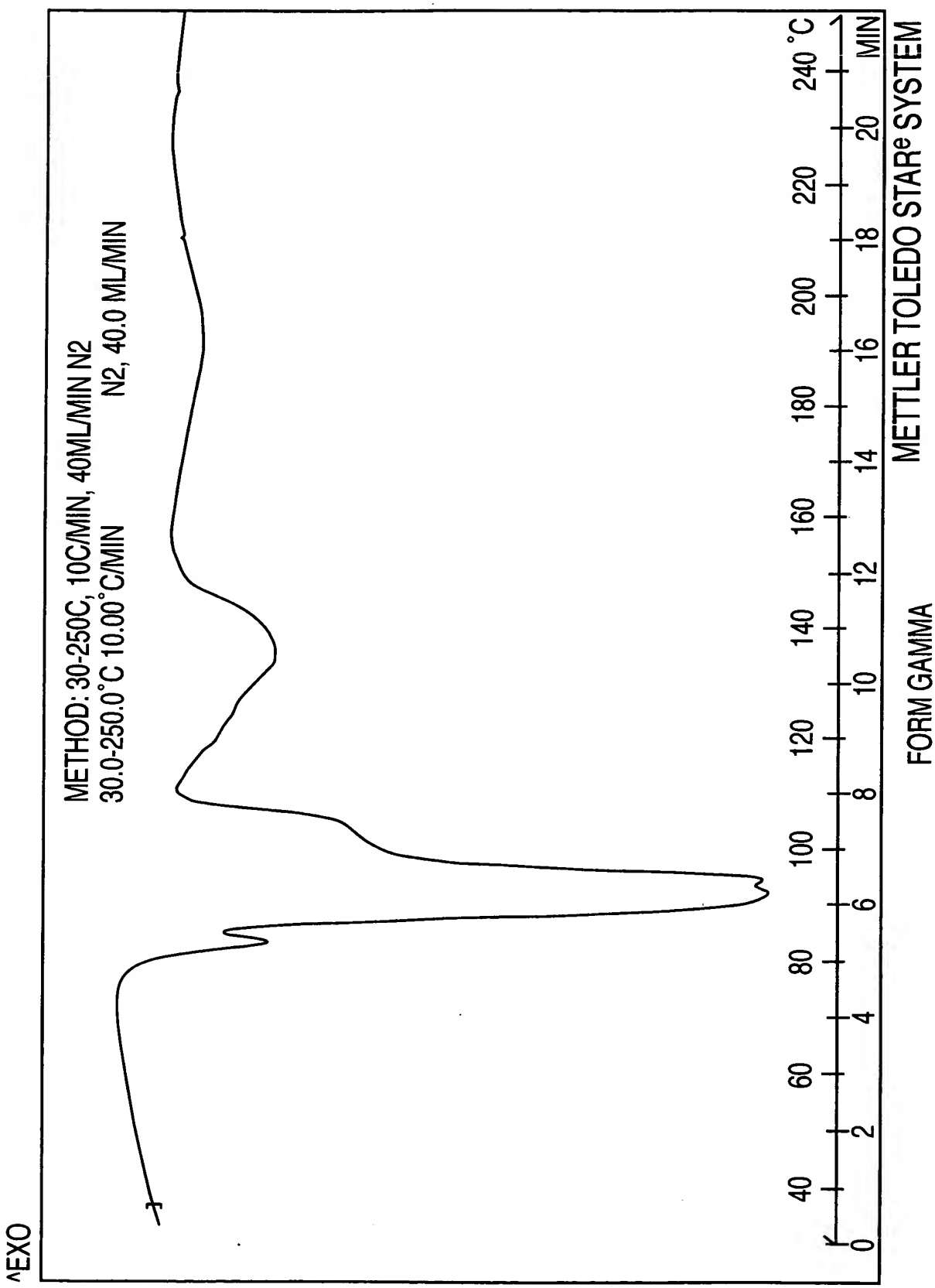

^EXO
METHOD: 30-250C, 10C/MIN, 40ML/MIN N2
30.0-250.0°C 10.00°C/MIN N2, 40.0 ML/MIN
0 2 4 6 8 10 12 14 16 18 20 MIN
40 60 80 100 120 140 160 180 200 220 240 °C
METTLER TOLEDO STARe SYSTEM
FORM GAMMA

FIG. 60

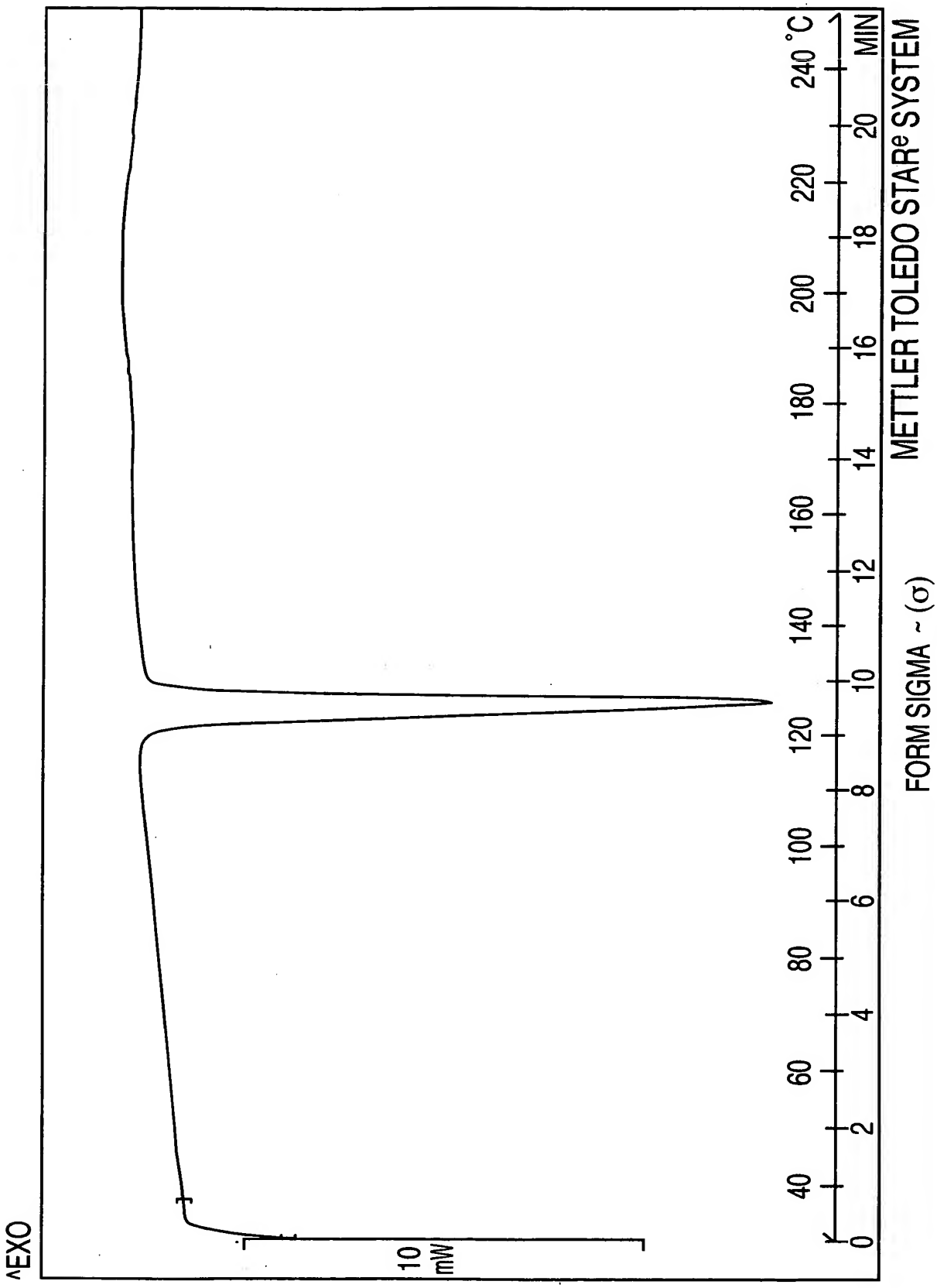

^EXO
10 mW
0
40
60
80
100
120
140
160
180
200
220
240 °C
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STARe SYSTEM
FORM SIGMA ~ (σ)

FIG. 61

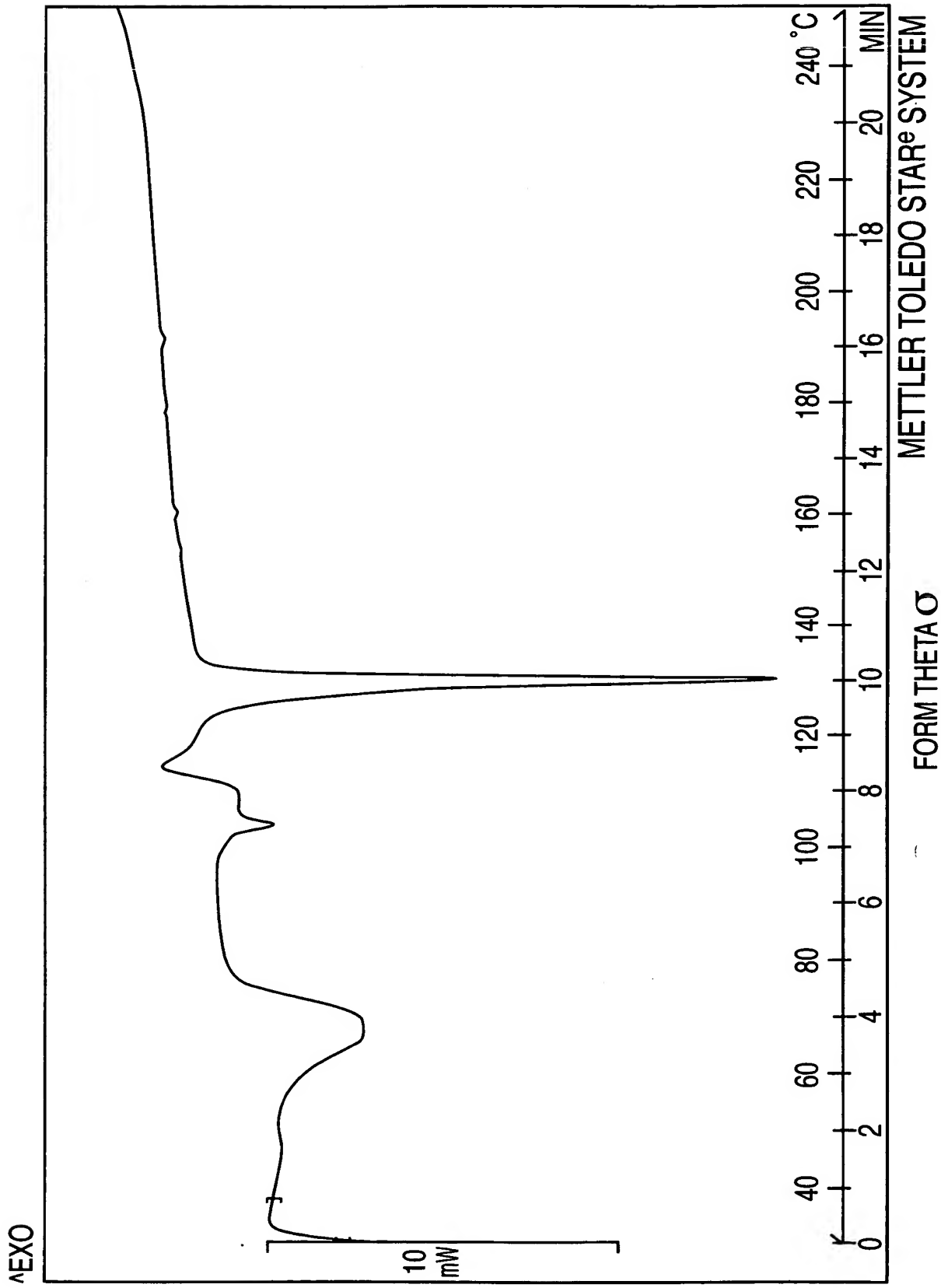

^EXO
10 mW
0
40
60
80
100
120
140
160
180
200
220
240 °C
2
4
6
8
10
12
14
16
18
20
MIN
METTLER TOLEDO STAR^e SYSTEM
FORM THETA σ

FIG. 62

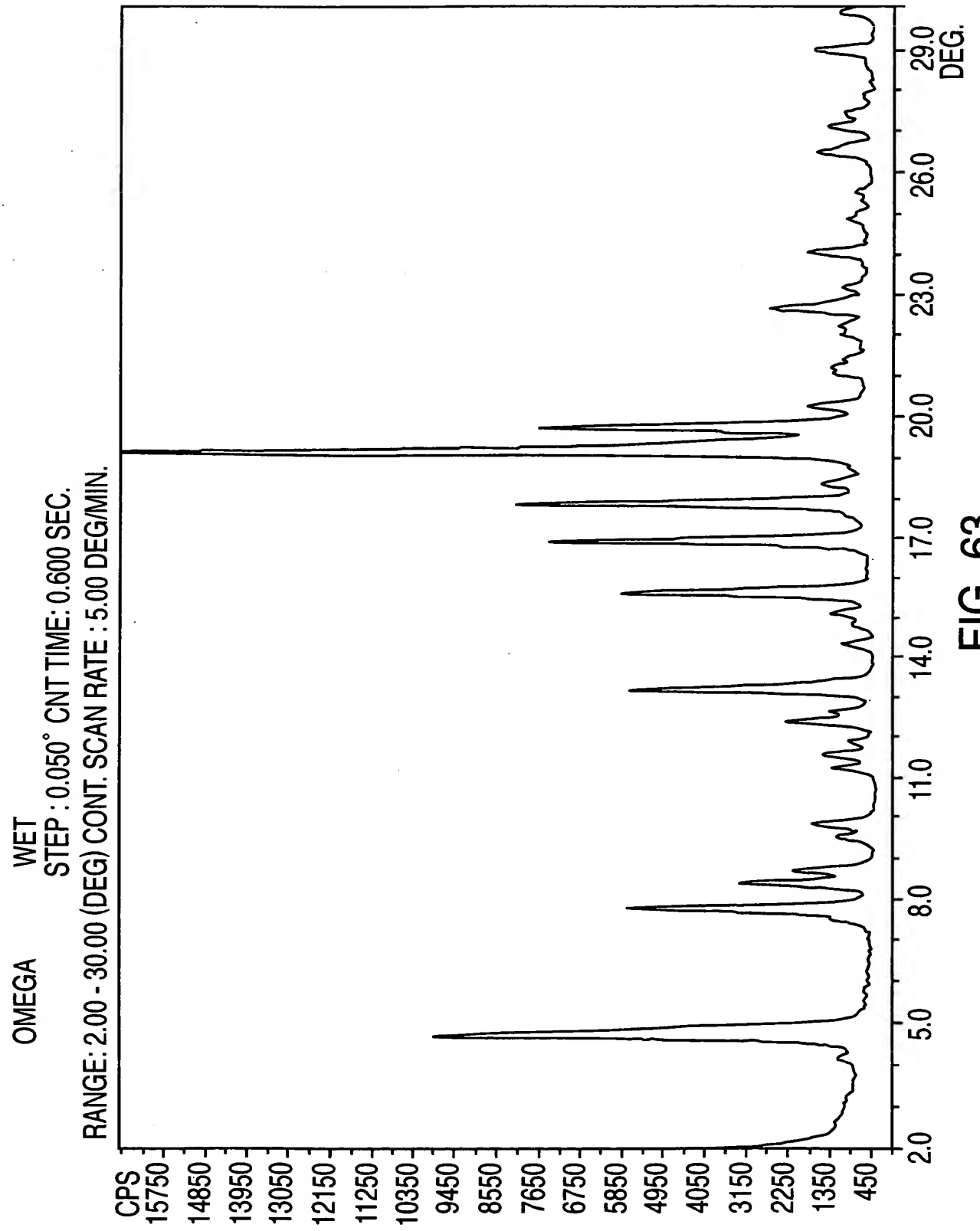

OMEGA WET
STEP : 0.050° CNT TIME: 0.600 SEC.
RANGE: 2.00 - 30.00 (DEG) CONT. SCAN RATE : 5.00 DEG/MIN.
CPS
15750
14850
13950
13050
12150
11250
10350
9450
8550
7650
6750
5850
4950
4050
3150
2250
1350
450
2.0
5.0
8.0
11.0
14.0
17.0
20.0
23.0
26.0
29.0
DEG.

FIG. 63

Comparison between the impurity profile of Nateglinide crystallized in IPA-H_2O and Nateglinide crystallized in Methanol-H_2O

Sample No	Solvent	Impurity prfile by RRT [% w/w]								
		D-PA (0.23)	(0.25)	(0.46)	(0.80)	Ipcha (0.89)	Dimer (1.38)	Methyl Ester (1.51)	(1.76)	Isopropyl Ester (2.3)
RL-2155/1	Methanol-H_2O	<0.01		0.02	<0.01	0.03	0.02	2.91	0.04	
RL-2163/4	IPA-H_2O	<0.01	0.04		0.02	0.02	0.01		0.03	0.02

Note: D-PA means D-Phenyl Alanine
Ipcha means Iso propyl cyclohexyl carboxylic acid
Both are the starting materials of the product
(-)-N-[(trans-4-isopropyl cyclohexane)carbonyl]-D-phenylalanine

FIG. 64